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"IF I HAD KNOWN"

ABOUT

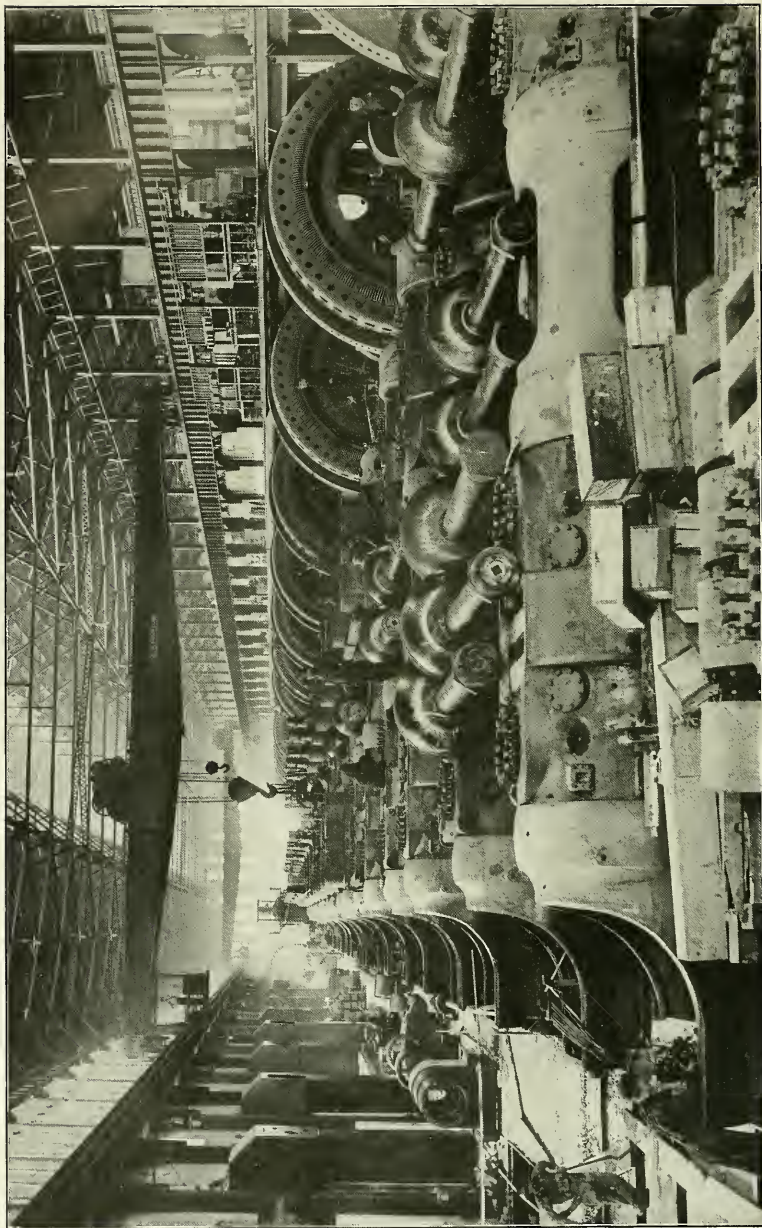
GARY

IN 1909



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The final stage of Gary's power—Interior of the electric station where the greatest group of gas engines in the world turn what was once blast furnace wastes into power sufficient to operate the entire plant. The seventeen twin-tandem horizontal units shown here develop 68,000 horse power—88,400 horsepower at the maximum load. Each engine weighs 840 tons and sprawls over floor space 44 by 70 feet. The cylinders are 14 feet in diameter and the stroke 34 inches. The six-ton blowing engine of precisely the same proportions is shown in the background. The total will be over a quarter of a mile long.

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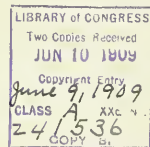
BY WILL H. MOORE

CHICAGO

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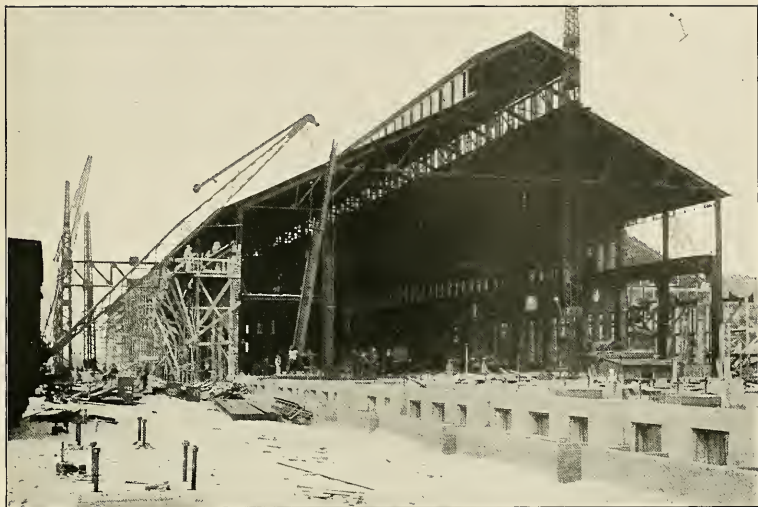
BY

WILL H. MOORE,
CHICAGO.



TO THE TENS OF THOUSANDS OF WIDE-AWAKE, SELF-
BETTERING PEOPLE INTERESTED IN THE *SUBJECT*
OF THIS BOOK, IT IS RESPECTFULLY DEDICATED.

FOR SOME OF THE DATA USED HEREIN, THE WRITER IS
UNDER OBLIGATION TO SOME OF THE OFFICIALS OF
THE STEEL COMPANY, BUT THEY ARE, TO NO EXTENT,
SPONSORS FOR THE ISSUANCE OF THIS VOLUME.



THE ELECTRIC BUILDING (in May, 1908).
The monster structure housing a quarter mile length of electric power engines. (See frontispiece.)

“IF I HAD KNOWN ABOUT GARY.”

The true story of Gary is unbelievable. In the hope that the reader may, after reading this book, have some degree of belief in the facts, the writer here prepares the reader's faith by asserting *that the one (now operating) steel mill of the United States Steel Co. at Gary (not including the other vast plants there) is the largest enterprise of the human race in all history unless it be the Krupp Gun Works in Germany, which have been two generations coming into their present pay roll of 45,000 employes. That this steel mill's capacity is seven-eighths of the total capacity of all of the United States Steel Co.'s other mills in the United States put together. That at this mill steel can be produced at less cost than it has ever been produced or can be produced at any other mill now existing. That these things mean that if for any period through lessened demand the United States Steel Co.'s production should fall off one-half, all of the steel they make will be made at Gary, and all their other steel mills in the country closed down until the demand increases.*

That these things, with the resulting, uninterrupted pay-roll of over a million dollars a week, and other existing conditions at Gary, further mean the sure, swift and marvelous oncoming there of a second Pittsburgh—but smokeless, clean and attractive.

Another marked peculiarity of Gary is that few people know about it. It is so near Chicago that it can be reached in about an hour on any one of perhaps fifty trains a day at a cost of only a few dimes, and yet probably only one Chicago man in ten thousand knows about Gary and perhaps less than one hundred knowing at all fully about it.

By a peculiar contradiction of human action, Chicagoans would investigate and know more about Gary if it was a thousand miles away. It is so near that they say on Tuesday, "We will go Thursday," and on Thursday, "We will go Saturday," and they have not gone. Scores are, however, now interesting themselves in real estate and business at Gary every week.

In the first months of Gary's existence the writer's attention was called to it by friends and clients, interested there, seeking his advice. He entered upon investigations to qualify himself to advise them, little thinking that it would lead him to years of exhaustive study of the most interesting subject in his experience. He was favored by having had thirty-five years of constant experience in real estate in all its phases. He found that among the many officials of various corporations that had most to do with the founding of Gary, he had many personal acquaintances willing to favor him with valuable information, not generally given.

He has had from the start a growing conviction that Gary in its industrial and municipal development and growth is the phenomenon of the age. In spite of increasing selling values of real estate and his sharp lookout for the development of boom conditions, he has remained convinced that no such condition exists or has existed.

He became so thoroughly posted, so full of the subject, and found that so

many, even in Chicago, were so astounded and interested in hearing the facts, that he was easily persuaded by his friends to the course he is now taking. Though having much invested at Gary, he has nothing there that is for sale.

THE GARY OF THE PRESENT.

The reader will quickly realize that in this book the writer aspires to no literary reputation. Whenever he could give the reader something better from others he has done it, and if his work is partly a compilation, the writer is satisfied so long as it is doing the best thing for the reader.

The Gary situation, as now assured, is a steel mill built and owned by a corporation known as the Indiana Steel Company, which is one of the subordinate companies of the great United States Steel Company.

Also the Steel Company's town site, about a mile wide north and south, and about two miles wide east and west.

Also the Steel Company's, about ten thousand acres of land (see map), out of which space has been provided and purchased for the American Car and Foundry Company, of over two hundred acres; also for the American Bridge Company of about the same amount; also about the same amount for the American Steel and Wire Company and recently the Steel Company has sold of its holdings 130 acres for a site for the new mills of the American Locomotive Works. The extent of these separate works and the forces they will employ is set forth later.

The writer hopes that the reader will feel enough compensated for buying and reading this book to pardon a page or two, somewhere herein, about the writer's personal touch with the subject, in which some of the readers may be interested.

In the year 1907 the author of this book wrote as follows:

"I hereby submit a statement of facts that will surprise and interest you. It is about the wonderful—amazing conditions, present and prospective, at Gary, Ind.—a business enterprise unequalled in combined size, speed and permanency in the world's history.

I have no real estate to sell there and represent no one that has, but I want to be widely known as one well informed about Gary and vicinity, and whose advice is of value.

Thousands of men in and about Chicago are investing largely in Seattle, Los Angeles, etc., not knowing that right here at home, at a location the corporate limits of which are only five miles from the corporate limits of Chicago, are combined investment and speculative probabilities surpassing probably any that ever existed in the United States.

The United States Steel Company, at a cost of over six million dollars, has quietly acquired for permanent ownership and use about 8,000 acres of land fronting on the Southern shore of Lake Michigan for about nine miles and extending back over a mile and a half.

On this land the company is well started in the outlay of over \$100,000,000 for modern, permanent buildings for many of its numerous constituent companies, and in the last few months many thousands of men have been at work and millions of money expended in preparing topography of sites, extensive cement foundations, cement-constructed harbor surroundings, canals, sewers, docks, railways and getting under roof numerous immense buildings (at a reported cost of over \$10,000,000) for the Indiana Steel Company, which will handle 5,000,000 tons of ore a year and 2,500,000 tons of steel. Of the steel rails alone the product will be 900,000 tons a year. The portion of this one plant equipped for the manufacture of rails will cost \$2,500,000.

The extensive production at Indiana Harbor, west of Gary, is from seven furnaces; the Indiana Steel Company alone is building at Gary one hundred furnaces.

Every advance known to science and industry will have its mark on these steel mills, destined to soon be the most extensive in the world in the manufacture of steel and the making of everything in which steel is the prime factor. The machinery in the works is very largely to be operated by electricity.

The harbor ship for the Company's lake fleets, with their cargoes, is being completed a mile long and will have a water depth of twenty-five feet and will be two hundred and fifty feet in width. The contract for the harbor and docks alone is \$1,500,000.

The company's extensive coking plant, with

a capacity sufficient for the needs of the entire works, is the only one so equipped in the Chicago district. Its location is east of the Indiana Steel Company's plant.

This is not to be a smoky city; modern methods enabling the extraction from the smoke of all gases and fumes, which are used again as fuel, the residue being practically invisible.

The ore comes from the company's northern mines, in the company's boats, and is unloaded at the company's extensive docks at a cost of only a few cents a ton, and carried to any and all parts of the works as desired.

This immense plant is only one of a group of very large manufacturing plants to be rapidly housed and provided with all modern facilities. Among these are the American Car and Foundry Company, which at Gary alone will have a capacity of about 40,000 finished railroad cars annually, or one completed car every six minutes, employing thousands of men.

This company's plant will occupy two hundred and twenty acres immediately west of the space occupied by the Indiana Steel Company and farther west on the Steel Company's premises, is to be built the plant of the colossal American Bridge Company, and adjoining it on the west is the location of the American Steel and Wire Company, and next is the Steel Company's Universal Portland Cement plant. They produce seventeen thousand barrels of cement daily.

These companies are expected to give employment to something like 50,000 workmen, which is said to mean a population of over 150,000, besides the many thousands employed by numerous adjoining independent companies (many of which use large quantities of the Steel Company's finished products), and other thousands of trades people, railroad operatives and the army of mechanics that are building these unparalleled works and this wonderful new city—to be larger than Indianapolis, Milwaukee or Seattle, and built in the shortest time in which any city of its size was ever built so largely and permanently of stone, brick and iron.

There are even now many miles of sewers, an extended water supply system already in use, and miles of substantially paved streets and wide cement sidewalks.

The average natural ground level of the Steel Company's holdings, and thousands of acres of adjacent property, is about fourteen feet above the lake level, which is fully as high as at Oakland, Kenwood or Hyde Park, in Chicago.

Electric lines enabling the workmen to reside some miles from the works are so certain that a lively fight is on as to who shall have the franchises.

The residence section is being converted

from stretches of sand to black dirt and clay sub-soil for grass and trees. The Steel Company's men in charge of this are said to have reported this soil alone would cost one million dollars and were told to go ahead. One construction company has contracts for five million dollars' worth of residences, costing from \$2,000 to \$15,000. On the business streets only brick and stone can be used, and fire ordinances are in force. City buildings, school buildings, churches, clubs and public parks are all being provided for.

that it will about double the Steel Company's production for the entire United States.

June 1st of this year ended the Steel Company's most prosperous year, and yet they then reported on hand unfilled orders for 7,603,878 tons, being nearly a million tons more than on June 1, 1906; and despite the very large output for June and July of this year, the unfilled orders are reported at over seven million tons.

Within the last two years the Vanderbilt



JACKSON STREET NORTH FROM EIGHTH AVENUE IN NOVEMBER, 1908.

Broadway, extending from one of the principal entrances to the works, over two miles south, is one hundred feet wide, with thirty-foot alleys, and the paving and sidewalks are not surpassed in Chicago. All underground pipes, etc., are in the alleys. For the most part, this development is being paid for by the Steel Company through its subordinate Land Company and the cost has been added to the price of lots.

The water system, pumping works, sewerage, gas and electric light plants start with a capacity for a population of three hundred thousand people.

The company, at large expense, is straightening and expanding the "Grand Calumet" river, and it is expected that soon it will be a ship canal, extending possibly to the Gulf. This river is within the company's holdings for about six miles. This location is geographically the "neck of the hour glass" through which must pass most of the rail traffic between the great West and the East.

The vastness of this industrial plant is such

roads have purchased at Gary, wholly for local railroad purposes, over 700 acres of land and the other railroads passing through the vicinity have bought nearly as much. These purchases are exclusive of what land has been bought for expanded rights-of-way, and the development and equipment of them alone represent a larger investment than that of some entire manufacturing towns. I am reliably informed that in the Gary vicinity the local railroad lines, side tracks, etc., exclusive of vast freight yards, are being increased 225 miles.

The railroads traversing this locality include the trunk lines of the Baltimore & Ohio, the Lake Shore, the Pennsylvania Lines, the Michigan Southern, the Wabash, and also the Indiana Harbor road, Chicago, Lake Shore & Eastern, Indiana Harbor Belt Line, Gary & Western, Chicago & Calumet Terminal, and the Elgin, Joliet & Eastern (the Chicago outer belt line).

The Steel Company is in no degree seeking to reap the benefits of advancing values in the

real estate caused by their operations. They have no real estate to sell except lots in their town plat within the limits of the town of Gary for a prompt improvement of a stipulated use and kind, and withhold the deed until it is done and the property paid for.

The company is stimulating the building by outsider of houses for the great army of employes, and say they will build only as they must. About one thousand houses, many of them for the higher salaried employes, are being completed. They sell houses to their employes only. The above only applies to the company's property. All other Gary property is sold as elsewhere.

There is not, and will not be, any paternalism, or corporate dominance of the affairs of the city corporation of Gary, as the Steel Company has only one representative on the Board of Trustees.

The company does, however, wisely dominate the management and development of their town site, and seem in all things to be snrely effecting their evident intention to make Gary in attractiveness to the eye and enjoyment of the residents there the model industrial city of the world. With their own millions they are paving many miles of street, putting in twenty-two inch iron water mains, nine-foot sewers, cement sidewalks, an extensive and expensive pure water supply, and condition all of their lot sale contracts so that nothing but good residences and business blocks can be built, requiring the improvements to be completed within an agreed time and withholding the deeds until it is done.

The owner of about fifty acres nearly a mile south of the Steel Company's land bought it less than one year ago at \$262 per acre and has since refused (wisely, I think,) \$550 per acre for it.

Thirty-seven acres located about two miles from the main entrance to the Steel Company's works was bought within two years for \$50 per acre, and has since been resold, first at \$450 an acre and again at \$500 per acre.

Some fifteen years ago a part of this land was bought by a syndicate of Chicago packers and it was given out that new stock yards were to be built. It really was bought to force an issue with the management of the Chicago Stock Yards, and succeeded. There is, and has been, an extended impression that a boom had existed and collapsed. The facts are, the packers resold their land to the United States Steel Company for about \$1,250 an acre, being several times what they paid for it, and they never built anything on it.

There are, of course, scores of similar illustrations of increasing values, and yet anyone

of intelligence, after going there, and considering the foregoing statements, can see that boom conditions do not exist, and that the causes for increasing values are keeping, and are likely to keep, in the lead, and that future advances, rapid as they will be, will continue to be along the lines of conservative, permanent values. The possible buyer should not hold back an hour on any thought that a "boom" has matured and prices are high.

The average business man, inclined to invest in Gary property, will need to do so largely on the advice of someone who has a right to his confidence and who has, with unusual facilities, studied the subject both in its immensity and in its details.

This requires experience, months, and money. The subject is vast and interesting. There are so many things that affect the present and probable future values (some of them difficult to learn, some of them confidential.)

Studying a map at home without much other information is useless; one's first few visits to Gary are merely bewildering and astounding. From the bridge across the "Grand Calumet" at the head of Broadway, the site of the steel mills resembles Jackson Park, the winter before the opening of the World's Fair.

It is impossible within a week, except through advice, to learn much of significance, and at the end of a week of deliberation and investigation, selling prices have increased, or the property being considered has been sold.

As quickly as I comprehended the situation I decided to represent **buyers** rather than sellers, confining myself to work on these lines for possible buyers who know me, and whose confidence I have or secure. **Sellers** interests are looked after by scores of keen, well posted agents, who, however honorable, are interested in their side of the business only. **Buyers** need intelligent advice from one not representing sellers. If I did not feel sincerely certain that I could save or make buyers much more than my services cost them, I would not be in it.

I advise the prompt purchase of well located acres at the right price, either in five or ten-acre tracts, individually, or by a syndicate of friends who can agree on a reselling price. Advice as to lots is equally needed.

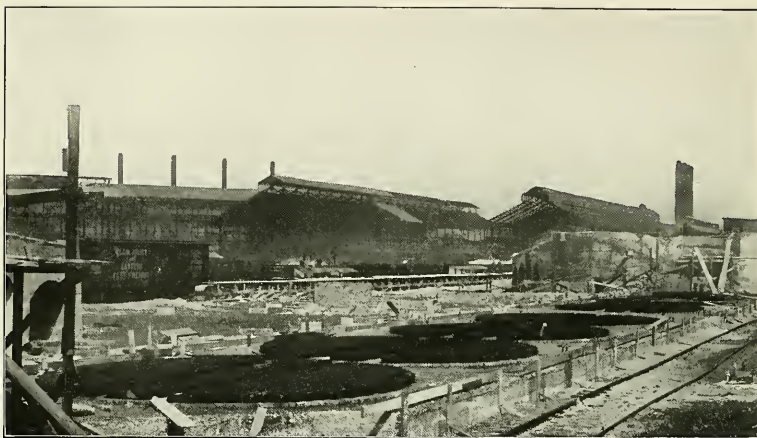
There is little trouble as to titles, as sellers usually furnish title guarantees by the Chicago Title and Trust Company, but a buyer should have legal guidance, and there are good lawyers in Gary.

WILL H. MOORE,

Room 829, 204 Dearborn St., Chicago.

Phone Central 881.

Chicago, Sept. 15, 1907.



FOUNDATIONS FOR "STOVES" NOS. 5 AND 6.

The above striking picture of construction at the mills shows the foundations of stoves Nos. 5 and 6, near the ore bins alongside the harbor. Stoves are always built in sets of fours. The round black foundations are steel T-rails placed close together in order to reinforce the concrete which will continue the construction. In the background are the two open-hearth furnace buildings, and the first section of the electricity building.

The foregoing was not printed until now, having been prepared for only those known to want it, being friends of the writer's and their friends. The very considerable business resulting from it has proven satisfactory to all concerned. In one slightly outlying locality alone in which the writer was among the first to predict advancing values, he has purchased for clients several acre tracts that since, measured by actual offers, have more than doubled in value. Some of his purchases have been made for investing clients who have never yet seen the property, having given him the money for the first payment with instructions to buy something he thought good. Another, an entire stranger at first, was, by mutual friends, induced to rely wholly and exclusively on the writer's advice and assistance, through months of tedious but successful negotiations for a low price. His investment has doubled in less than a year, and will bring

him thousands more. To these people, and scores of others, including banks, the writer is in position to refer, after a personal meeting or correspondence. Others have come direct from home to the writer's office, arranged for and had his advice, and concluded purchases alone.

For information of those who may come to my Chicago office expecting to advise with me about Gary investments. I should say that whether I am here or not, one of my assistants will arrange and receive pay for an appointment for some hour, that day or the next. This does not apply to my personal friends who would invest through me, if at all. If you advise with me it is better to do so before talking real estate with any seller or seller's agent. After an interview, I generally find myself in position to either take such a client to Gary, or send him with one of my well-posted assistants, without further charge.

My having nothing for sale at Gary and its being known that scores of probable buyers come to see me, causes many owners of Gary property to let me know what they have for sale, their price, etc.

Where the prices are, in my judgment, right, my client is given the benefit of only such of these properties as come within the kind he wants to investigate. Then if he wants me to negotiate a purchase, we can arrange that.

In most cases we can arrange whereby, fairly to you, any charge for my services in negotiating and buying, will be paid by the seller, which is quite customary. In such case, the fee paid is returned. (See last page.)

This is all in these pages about the writer and his business. He does not claim to be exclusively well informed or reliable. Among those operating in Gary real estate are scores of honorable, well-informed men, any of whom can freely refer to the writer and to any of whom he is proud to refer. What exceptions there are the writer declines to mention or be asked about.

WHAT HAS BEEN DONE.

Since the foregoing letter of September 15, 1907, was written, among many other things of material and permanent significance that have come into existence, are the following:

The big steel mill has been completed to such an extent that they are already making steel rails, with a limited force, of course, at first.

The great harbor slip has been completed, and its \$800,000 "turning basin" for the ore boats to turn around in is in course of construction.

The Steel Company has brought from their own northern iron mines, with their own fleet of boats, into their own harbor, and by their wonderful unloading devices, put into some of their immense ore bins (each bin as large as two city blocks) 840,000 tons of iron ore.

All of the other millions of dollars worth of buildings and their equipment, including blast furnaces, gas conservers, a row of immense gas engines a quarter of a mile long, open hearth furnaces, etc., to complete what they call the "first unit" of their immense production plant have been built.

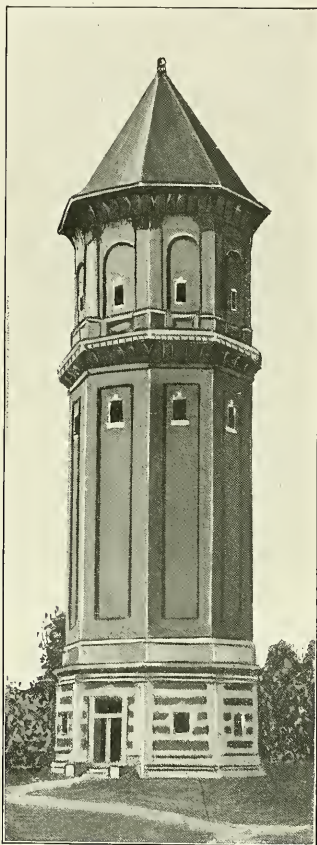
They have removed temporary buildings and prepared a site of nearly forty acres for the buildings and grounds of a \$200,000 hospital.

They have brought shiploads of stone and timbers to construct at the mouth of their harbor slip, the largest and finest break-water on the Great Lakes.

They have completed the water tunnel under the waters of Lake Michigan for over a mile to a point where they have constructed an in-take crib and in one of the city parks, have practically completed a water tower and about completed the pumping station, which provides a supply of pure water sufficient for a population of 300,000 people.

They have added to their holdings of land provided for industrial plants nearly 2,000 acres. They have completed the "Kirk Switch Yards," which is probably the largest system of switching and freight tracks at any

one spot on the Globe, so large that it requires a little town of its own to accommodate those who work there.



GARY'S WATERTOWER.

Height from foundation to tip of roof, 160 feet; diameter 41 feet; circumference at base 125 feet; capacity of water tank, 300,000 gallons.

Scores of miles of new railroads now grid-iron the extensive industrial tract of the company. Most of these roads are elevated. The main trunk lines of the Lake Shore and Baltimore & Ohio

railroads have been, for a distance of about ten miles, picked up and moved to the south to accommodate the Steel Company's building plans. Two outer belt lines around Chicago have been brought into Gary and connected with the net work of tracks that run to all of the mills and will run to, and through, all of the future mills.

The site of the American Car and Foundry Company is in the hands of the engineers and surveyors, who are providing the data for the figuring of contractors to construct the buildings, which it is said will cover almost entirely 212 acres and furnish employment for over 15,000 men, and have a capacity for 200 steel cars daily. This plant will be built this year.

The great American Locomotive Works have been provided with, and have bought, 130 acres of the Steel Company's land and are preparing to at once construct on it larger works than any they now have, which will employ many additional thousands. The permanent plans of the American Bridge Company and the American Steel and Wire Company are reliably stated to be only in abeyance for a short time, and the construction of numerous new steam railroads to and into the proposed sites of these companies, confirm all prospects. These also are companies among those which employ the most thousands of skilled workmen of any in the world.

The Town or the City of Gary has gone ahead in keeping beyond all believable predictions. The daytime population of Gary and vicinity has been from the start, and still is, perhaps three times its night population. This is due, first, because the working population there have, up to now, been

largely on construction and do not feel sure enough of permanent employment to establish homes at Gary, and, second, because there are no habitations at Gary that can be rented. Hence these workmen have been coming and going by thousands on scores of trains, which permits them to live at Whiting, Indiana Harbor, Hammond, South Chicago, Englewood, Chicago, etc. While these thousands and other thousands will be employed in similar construction on work at Gary for years, the Steel Company prefers to confine itself to providing permanent homes for its own coming thousands of steel workers. As soon as private capital and enterprise realize the great demand for homes by tenants, thousands of these workmen on construction can and will also become residents of Gary. The first people who reside in or about Gary (and possibly the only ones) that can be reasonably "expected" to cease living at Gary, are the unskilled;—people making up what is known as common labor. Many of these, as in all such cases, have now, scattered throughout the outlying region of the Town of Gary, homes that do the community little good, and which will be torn down. In fact, the Steel Company, every month, is requiring the destruction of scores of these temporary buildings, that they permitted to be located on their ground for the sake of getting the men's labor.

So while the present population of Gary is about 15,000 people, the great growth and improvement in population and in average character of the citizens and the grade of homes they will occupy, are, with the opening of the great mills just at hand, and it is morally certain that this great incoming increase of population during the present year, will do more to advance

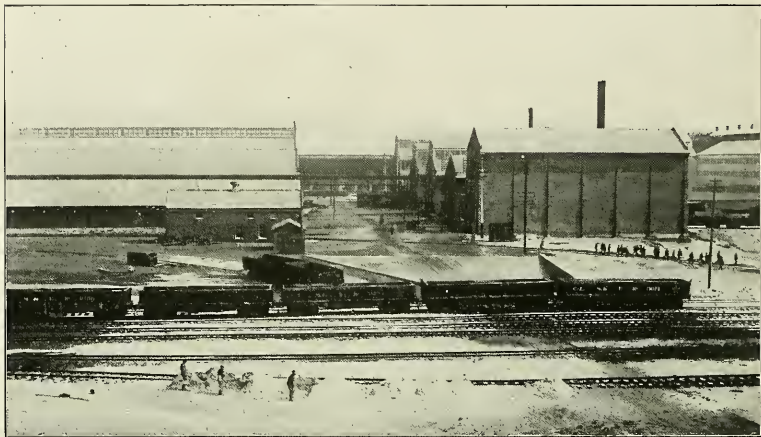
the selling values of real estate, than even the great mills. While it is true, these mills are the GREAT CAUSE, they are infinitely harder to realize the significance of than the town itself with its great increase in building and population, because the possible investor, coming to Gary, can *see* the town and comprehend the increasing population and extensive building more than he can the mills which he is not permitted to get into or see and which he could not comprehend if he did see, unless they were in full blast, and they are only starting.

The electric street car lines which early obtained their franchises and were waiting the income of population, are now in actual running operation, with large modern cars, good, frequent service, and usual city fares. The quick and inexpensive travel communication between Gary and Chicago amounted a year ago to about fifty trains daily, but even this has been largely expanded both by new steam and electric lines, and by more trains. Some of this expansion and improvement has much increased the accessibility and future prospects of some very choice outlying land around Gary where a purchaser of acres can profitably subdivide them into desirable residence conditions for the very many who prefer to live away from the activities of the city.

The Illinois Central Railroad has just emerged victoriously from a long and persistent fight to extend its freight and passenger service over a branch line into Gary. In extending this branch (which is called the Kensington & Eastern) from near Pullman on their main line to the Indiana State line, they run through the Third and Eighth wards of Chicago, and in the

final adjustment with the Chicago City Council, they elevated the entire branch and put in street crossing viaducts.

through extensive and ample drainage and many wise and prudent ordinances. Conditions to enforce good order, lawful conduct, and safety to



Tracks over subway and the north end of Broadway inside the works, showing some of the auxiliary shops.

The Chicago, Lake Shore & South Bend road now runs trains from the Illinois Central city depot into Gary every forty minutes with numerous local stations in the Gary vicinity.



CITY OFFICIALS INSPECTING ONE OF GARY'S SEWERS.

In addition to expensive provisions for pure water, everything that money and good sense can do has been done to make the locality one of the healthiest,

life and property, have been amply provided, as well as protection against fire, etc. The spirit and purpose of the Steel Company's plans are not more evident in anything than in the matter of schools. In addition to some fourteen modest temporary school houses scattered about the town, one \$60,000 permanent school house is completed and in use, and the construction of the Emerson Public School is well under way. This building, which will cost approximately a quarter of a million dollars, is probably not surpassed in New York or Chicago.

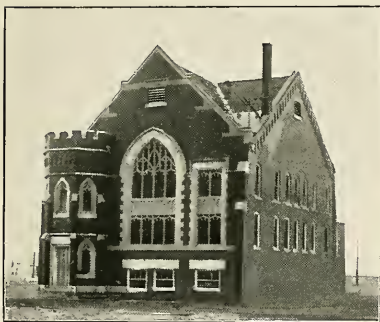
There has also been remarkable and satisfactory growth from the standpoint of most present or future residents of Gary in organizations that have to do with the religious and social sides of city residence and the or-

ganizations that, through public spirit, make for the public welfare of the community. Almost every religious denomination that has an organized church society in Chicago has one in Gary. Many of them have built, or are building, large, fine church edifices. About all of the lodges, secret societies, fraternal orders, etc., have established branches with the usual meeting places at Gary. The college men have a University Club of nearly one hundred members. The lawyers have a Bar Association. The real estate men have a Real Estate Board. The doctors have a Medical Society, and the general welfare of the community is forcefully looked after by a strong Commercial Club representing among its active members, almost every branch of business or employment in the city.

tional brick and stone substantial business blocks until almost solidly built up. At one time during the fall of the year 1908, 1,000 feet of Broadway frontage were being so improved at one time. Three banks, occupying their own fine buildings, are doing business.



GARY STATE BANK, BROADWAY.



PRESBYTERIAN CHURCH, GARY.

WHAT IS BEING DONE.

Broadway, the central business thoroughfare, has been legally extended and widened to 100 feet in width for another two miles and about \$50,000 has been appropriated for a new bridge over the Little Calumet River. Broadway has been improved by addi-

The Gary & Western steam Railroad, mostly elevated, has been completed by the Vanderbilt interests, and is designed largely for Chicago and Gary passenger service with local stations about a mile apart in the Gary district, adding very largely to the number of Gary-Chicago trains. The Chicago, Lake Shore & Eastern road's repair shops, employing something like 2,600 men, are being completed in Gary.

The postoffice business of Gary has grown so rapidly that the office has been jumped from a fourth-class to a second-class office, and free delivery by carriers has been ordered by the Postoffice Department. This rapidity in development and advance in the rank of the office has no parallel in the history of the Department.

The social and moral phases have developed to a gratifying extent. Church buildings and school buildings have

multiplied and saloons and saloon licenses have been wholly wiped out.

The wonderful subject of Gary has commenced to attract attention from four continents. Magazines and newspapers throughout this country and Europe are writing it up generally or on specific subjects.

CIVIC LIFE AND FORCE OF GARY.

Lastly, and far from the least, is the fact that the citizens of Gary have developed and manifested great civic interest. In and outside of the alert and earnest Gary Commercial Club is the old civic pride, wisdom and energy



FIRST NATIONAL BANK.

The Steel Company has taken out of the market all of their remaining business lots on Broadway and Fifth avenue, the two business streets in their town plat. The reason given for this shows the wisdom, spirit and intent of the Steel Company in relation to the town and the prosperity of its business men. They say that they have sold business lots on a basis that compelled the owner to at once improve them with business properties, and they propose to protect them in securing successful tenants and sure rentals as against overbuilding.

that in Chicago, and other cities, laid surely the foundations for great municipal results. They have not been content to wait supinely on the Steel Company's doings or its millions. As has been written:

"The citizenship of Gary is well informed and alert. It has already shown a disposition to watch carefully its public interests. Rightly or wrongly, it has, on occasion, taken issue with the controlling industry of the place. Yet it is a tribute to American fair-mindedness that there remains on both sides—citizens and com-

pany—a good spirit of working together. It is hard to find a soul who fails to 'point with pride' at the industrial genius which has found expression in the place, and every business man believes enthusiastically in the city's future."

No town that talks of "yesterday,"
 Garyland, my Garyland.
 But straight ahead you take your way,
 Garyland, my Garyland.
 And you, pre-eminently grand
 Through all the centuries shall stand,
 Because your builders have the sand,
 Garyland, my Garyland.



THE MINNESOTA BLOCK.

One of Broadway's scores of business blocks. Many of which are three, four or five stories high.

Often when these enthusiastic, forceful people come together in conferences or at banquet, their ever existing home city spirit finds expression in singing the following, written for the Gary Commercial Club, by Wilbur D. Nesbit, the widely known Chicago poet and writer:

We lift a song in praise of thee,
 Garyland, my Garyland.
 We know what a great spot you'll be.
 Garyland, my Garyland.
 The wheels of progress all will hum,
 And Gary will be going some
 Through all the splendid years to come,
 Garyland, my Garyland.

So here we drink a brimming glass,
 Garyland, my Garyland.
 To you whose glory ne'er shall pass,
 Garyland, my Garyland.
 The desert blossoms as the rose,
 And that's the way that Gary grows;
 I'm mighty happy that I chose
 Garyland, my Garyland.

Not the least among these vital, ever persistent forces, is the Gary Tribune, now a widely read daily, and as able and interesting as any local newspaper the writer has ever seen in any city of 100,000 people.

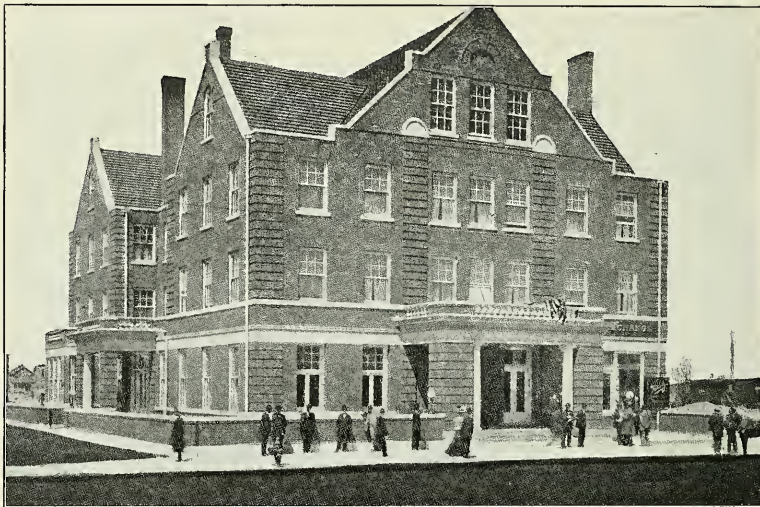
SOME QUESTIONS DISCUSSED.

It is natural for a man contemplating an investment, the profits on which depend to any degree on future developments, to question its sureness. In the Gary proposition the writer thinks of but three questions that seem reasonable:

1. Is Gary going to be a large city?
2. Probably how soon?
3. May not growth in real estate values be hindered or reversed by occasional "shutting down" the works through slack demand for their production?

prices on their town lots and all their actions pertaining to real estate, in or about Gary, show that they are not seeking or expecting to make money by buying and selling real estate, the reader must remember that neither the Steel Company nor its predecessors have ever at any point sought to make money out of real estate.

If the reader, after finishing this book will thoughtfully consider, he must admit that if the Steel Company expected that the population of Gary would only be 40,000 or 50,000 people, they never would have expended their millions as they have to create even



GARY HOTEL—ONE OF FIVE.

As to the first, it will be conceded that the officials of the Steel Company come very near knowing the answer. As is well known, such officials do very little talking and give out little advance information, so we must read their knowledge by their actions. While the Steel Company's selling

present conditions at Gary, including water, sewerage, etc., for a 300,000 population, which population the writer believes to be certain.

As to the second question, "When," it may be safely answered, within the fewest years such a development ever occurred in the history of the world.

It is not alone the probable 50,000 steel workers who are now sure to come this year and next, but the tens of thousands of merchants, trades people, professional men, building mechanics, etc., etc., that are always connected with, and essential to, a large industrial city, and every city. When you come to think that by the generally accepted basis of count, 50,000 heads of families means 200,000 people, and that there must be probably 25,000 other citizens, mostly heads of families, you get the problem and the prospects.

It may be thought that Gary is too near to Chicago to ever be a large city, and yet we must remember that in the shadow of Boston, are such large industrial cities as Lynn (90,000), Taunton (40,000), and Worcester (140,000), and that near at hand to New York City, are Jersey City (250,000), Newark (290,000), Trenton (90,000), Paterson (130,000). That the substantial City of Youngstown (55,000) has grown up near Cleveland; Erie (65,000) near to Buffalo; Allegheny City (160,000) near to Pittsburgh, and that within an hour's ride of Philadelphia have grown up the hundred thousand populated towns of Reading, Trenton, Wilmington, Camden, etc., and that the above list does not include scores of cities of 30,000 or 40,000 people that almost adjoin each of some one of our largest cities.

The third question is practical and met largely, of course, by the question

as to whether or not the Gary mill can make steel, etc., materially cheaper than any other mill or mills of the Steel Company, or others, throughout the country. The writer here again asserts that the big new mills at Gary will not only be of capacity to make one-half of all of the United States Steel Company's production, but can make it at so much less cost that if the Steel Company's orders ever fall off one-half, **that all of the steel made will be produced at Gary and all other mills closed down until the demand increases.**

This is an interesting and startling statement, but after the reader gets the facts and considers that the Steel Company have never in their history made steel except on orders, and where they can make it the cheapest and have never run any mill for the purpose of keeping the workmen in any town or locality at work, he must concede that the answer to question three turns on whether or not the Gary mills **can** make steel much cheaper than the company can elsewhere make it. I am justified in here inserting the most able article on that subject that I have ever seen.

It is also of great interest on the general Gary question. It was published by one of our most valued magazines, to wit: "System," and was written early in the present year by one of its able editorial staff, Mr. Daniel Vincent Casey.



THE RAIL MILL IN NOVEMBER, 1908.

The line of stacks at the right mark the furnaces or "soaking pits" in which the steel ingots are heated before introduction to the first train of rolls in the rail mills. Notice the lofty towers which carry the transmission cables furnishing power to the machinery of the various mills and furnaces of the great plant.

The Sum of a Thousand Short Cuts.

How the economies, the time-saving devices of a hundred plants have been concentrated in the world's greatest plant at Gary which contains cost-cutting and result-bringing suggestions for every business.

A stereopticon image magnifying a hundred fold the problem-details facing every business man—

That is Gary.

Because of its magnitude—the world challenging job of creating a new city, a deep-sea harbor, industry's biggest steel mill—Gary has held the attention of four continents since 1906; interest redoubled with the "blowing in" of its first furnace a few days ago.

Size, however, is its smallest quality. To the business man its imperative claims are its efficiency, economy, speed. It is the shrine of the short cut—a composite of the best in power, in production, in saving.

It is a hundred-million-dollar lesson in the science of making and selling—a demonstration in steel and concrete of the parts foresight, strategy and exact knowledge should play in every business—a public test of the principles you can profitably apply in your factory, your office, your store, however great or small.

GARY is a misnomer. The new steel capital on the southern lip of Lake Michigan whose first blast furnaces spouted golden metal the other day, should have been christened Economy, Indiana. For economy is the inspiration and the genius of the place. Location, size, arrangement, equipment, and every great and lesser detail of the whole huge plant serve that one master purpose—saving. Saving of materials, time and labor; conserving of energy; elimination of wastes. The problem of producing more steel and cheaper steel than any other mill on earth has been worked out with the confident foresight of experience and the certainty of mathematics. Some \$42,000,000 have been poured out on the Indiana barrens in a little more than two years. This to complete the first unit of production, to create a harbor for its ore and fuel boats, to provide a town for its army of workers; and \$33,000,000 more will be required for the construction now under way.

Immense as this total is, it will be doubled—more likely trebled—before this later Pittsburg finds its level of maximum output.

For another twelve-month, the builders will outnumber the steel makers. Of the treasure already invested in the plant, the millions appropriated, no dollar has gone or will go for experiment. Here lies Gary's business significance—its lesson to every man who makes or sells for profit. The courage and imagination which have spent forty-two million dollars to clip a few vital seconds from the birth throes of a steel rail are linked with cool-brained conservatism. No device, however promising, which has not been tested exhaustively, beyond chance of failure, has been given place in the scheme. Gary takes no risks. The plant is a summary of the proved methods and tried processes of steel making de-

veloped to the present limit of logic and safety.

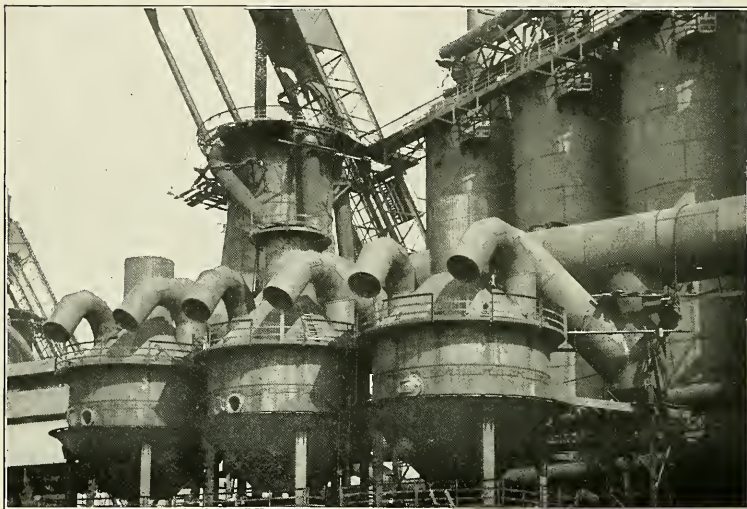
It is a convention of the short cuts which have slashed steel costs year by year in the face of rising fuel, ore and labor. Its furnaces, its power generators, its conveying machinery, its giant rolls and motors, though they mark the frontier of progress in steel making, have all been tried out in previous installations.

The best, the record breaking features of all other mills have been assembled, magnified. To them have been added all that the craft of factory engineer and transportation expert could offer. A site, a town, a harbor literally have been manufactured to order. The result evolved is the most perfect big industrial plant the sun shines on.

For the sun shines at Gary. That is the primary miracle. The pillar of cloud which marks other creative towns is lacking. Smoke spells waste; and here they have cut down its prodigal blackness to a thrifty mist which hardly dulls the blue of the sky.

Power—the basic factor in every industry—is Gary's surpassing economy—by-product instead of tax. Blast furnace gas, once absolute waste and hateful poison in the air, is here harnessed to titanic labors in the largest and most interesting group of gas engines in the world.

Half the installation is in place—seventeen electric units generating 68,000 horse-power and sixteen blowing engines developing 40,000 more. Get double that energy from steam turbines and your boiler room would eat 800,000 tons of coal annually. There you have Gary's initial saving—the pinnacle of free power towards which for twenty years steel makers in America have struggled.



GAS WASHER, STOVES AND FURNACES 9 AND 10.

From the dust catchers, the gas travels to the preliminary washers shown above, where it undergoes the second cleansing process. In the background may be seen a blast furnace with one of its "stoves" at the right.

"Lean" gas was the pioneer effort towards economy—analysis of ore, coke, limestone and patient experiments in furnace management contributing to that result. Followed crowning of the furnace stacks and capture of enough gas to fire the enormous "stoves" supplying the hot blast; finally retrieving of all the gas, and after cleansing, burning under boilers to get steam for power—not power sufficient to beat the product pig-iron into steel rails and bars. That was reserved for the self-contained efficiency of Gary, whose gas engines develop nearly twice as much energy from its furnace wastes as would boilers and steam turbines, and where **no coal is burned for power.**

Those engines—German invention linked with Yankee design—are the largest ever built to be driven by blast furnace gas.

Massive as they are, the electrical units turn their centers eighty-three and one-third times a minute as quietly as a leisurely Corliss and buckle to their overloads without apparent strain. They mark the passing of steam in the steel industry, except as emergency and secondary power; just as Gary's central electric station and the displacing of hydraulic, pneumatic and steam appliances wherever electricity can shoulder the job, sets a new standard of economy in steel mills. In the billet mill where speed in handling is a vital factor because the steel loses heat each moment, seven sizes of cranes, from five to seventy-five tons, expedite operations. To equalize the pull on the generators and thus squeeze the last atom of energy out of the gas an immense storage battery waits hungry for idle "juice," returning it on peak loads.

Steam has not been ousted completely, however. It has its province of efficiency; and the study at Gary has been to match every job with the most economical agent. Therefore, after the first cleansings and the diversion of 30 per cent. of the gas to the heating of the blast furnace "stoves," $7\frac{1}{2}$ per cent.—1,700,000 cubic feet hourly—is burned under boilers. This supplies pressure and water pumps—four 30,000,000 gallon pumps are in place now—warms the buildings and furnishes steam for the gas producers of open hearths and "soaking pits." The preponderance of gas for power purposes is shown by the allotment of full 60 per cent.—13,400,000 cubic feet per hour—to internal combustion engines.

Gary's power is only the climax of its economies. They began before the first steam shovel burrowed into the Hoosier sand hills. They were born with recognition by a great organization of specialists of the steel needs of the west—railroad steel, structural shapes, billets, plates and bars to feed a thousand customer factories—and the conception of a plant big enough to satisfy those needs. They took concrete shape with the choice of a tramps' paradise for the raising of a city of industry and the mightiest and most efficient steel mill the captains and the specialists together could evoke.

The Strategic Factors Which Determined Gary's Location.

Many elements contributed to that choice. Assembling of raw materials and distribution of product were the vital, inseparable factors. Where could the ore of the Superior ranges, the coke of the Alleghenies and a store of limestone be laid down together at the lowest cost? Where were the markets, existing and potential? Where

an adequate labor supply, with surroundings making for stability and efficiency? Could materials, markets and labor be brought to a common focus, where was land enough at reasonable prices to accommodate the visioned mill? Square miles were wanted; the new plant was building for the Century of Steel and experience warned that no boundaries be out on its expansion.

Gary was the answer—genius discovering it. Found and explored, it satisfied every requirement of the corporation strategists, production experts and engineers.

In the rough, however, with Lake Michigan and cheap carriage for its ore handy, it lacked a harbor. With-in easy call of an inexhaustible labor supply, it lacked a tributary town to house its workmen and anchor them to their jobs. With twelve square miles of land available, the strategic lake front was so cut up by railroads and the superfluous Calumet river, that nowhere could the builders find a base big enough for their operations.

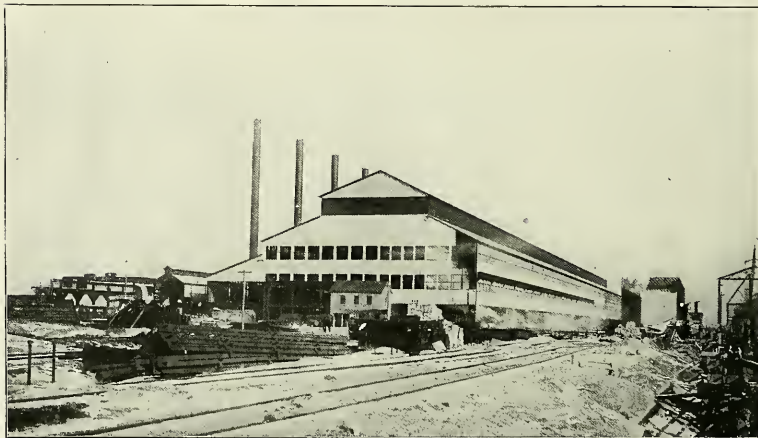
Compromise with any condition affecting production was not considered, however. The chosen site was treated like so much raw material—made over at tremendous cost that none of its limitations might restrict either speed or efficiency. "Build the perfect plant on paper," the command was, "then fit the site to the plant."

Not less than two million dollars was spent on this work of preparation. The winding Calumet River was banished to a new channel. The four railroads crossing the mill site were evicted like fussy children hindering industry—big roads, too, like the Lake Shore and the Baltimore & Ohio, which were torn up by the roots for over ten miles. In all, to strip the site and provide connections, about 100 miles of track were moved and reconstructed.

Cleared of obstructions, the site was yet too cramped for the builders. The base-line of their perfect mill was a string of sixteen 450-ton blast furnaces, set at right angles to the lake, with ore docks and a harbor one mile long to feed them. Between the remodeled river and the beach was only three-quarters of that distance. The four outer furnaces, therefore, were given stations **out in Lake Michigan**. Lacking elbow room on dry land, it was annexed off shore. In two years the lake has been pushed back 700 feet. The harbor has crept even farther to deep water.

ore, will handle it more cheaply and more swiftly than any other installation on the lakes. For speed counts here as elsewhere. Every minute the big freighters lie at the dock costs the better part of a dollar.

For economy's sake, also, the builders disregarded the twelve square miles they owned and kept their colossal units all on 800 acres. Compactness earned a premium, since the incandescent metal from the blast furnaces, the glowing ingots from the open hearths, would lose heat every needless foot they had to travel between operations.



ONE OF THE GREAT OPEN HEARTH BUILDINGS.

Length of building 1,200 feet; width, 193 feet; height, 104 feet; capacity of building, with one furnace out of commission, 2,500 tons of steel per day; brick in furnaces, 11,200,000; structural steel used in construction, 5,500 tons.

This harbor—created off-hand—has a 250-foot channel, a 750-foot turning basin inland and berths for half a dozen 12,000-ton ore boats. With the outer breakwater and ore handling machinery it will cost several millions. But economy is part of the bargain. Not only was it vital to the plan of the works: its unloaders and bridges working synchronously will discharge more

The continuous process—acme of production in any industry—means more at Gary than steady progress forward, without halt or retrograde movement. It stands for the straightest, shortest, easiest line between ore docks and shipping yards. It stands for speed, for the elimination of every second not employed in conversion or manufacture, for the saving of every

possible heat unit in molten iron, in glowing ingot, bloom and billet—since the loss must be restored and in the later process the steel would suffer in ductility, quality. Hence it stands for highest production per capita, per horse-power, per dollar invested.

Playing Chess with Giant Powers, Economy the Prize.

Intra-works transportation plays a mighty part in this thrifty hurry. **The switch track, indeed, is the vital factor in Gary's scheme.** Other steel plants may adopt its gas engines, copy its enormous open hearth units, duplicate its surpassing rail mill. But they would have to rebuild from the bare ground up to attain the economies secured at Gary by the arrangement of furnaces and mills. The placing of these was dictated by the speed a laboring locomotive can make on a curving switch track.

To relieve the locomotive and achieve speed, the right angle was abolished in locating the various units. Instead of setting the blast furnaces parallel or at right angles to the tracks serving them, they were placed at an angle of 22 degrees, allowing a 200-foot radius for the entering switch. A train of forty-ton ladle cars can negotiate that swiftly, easily, with little outlay of power and no danger of accident. Reversing on the main track, they will rush away to the open hearths on long, easy curves of 800 feet radius. What goes in at the near end of each unit goes out at the other, one step nearer finished product. There is no "backing up" except of empty ladles or cars.

From the casting floor of the open hearths, the ingots go to the mould-stripping houses, thence to the soaking pits and the ordeal of the rolls. Between blast furnaces and open hearths the angle to be overcome is

only 57 degrees; between the latter and the soaking pits about 70 degrees. The shortest curve in the 175 miles of track which will serve the mills has a radius of 200 feet; nearly all are upwards of 400 feet. The elevated approaches to the furnaces and mills were planned with the same canny regard for speed where speed is vital; elsewhere they are a compromise between economy of space and of power. The company's locomotives will do the switching—the cost will depend on how fast they can move a load, how little coal and time they consume. Continuous gravity tracks at the shipping platforms allow the shifting of loaded cars without engines.

Analysis of the work's transportation can go no further than to say that it embodies the most advanced railway practice. Switch and service tracks, except those at the blast furnaces, are continuous; blockades are impossible, both ends being accessible and the forward movement of cars is uninterrupted. The same principle obtains in the "Kirk" classification and storage yards and in the locomotive house, through which tracks and pits run at an angle, abolishing the turn table. These individual savings, multiplied daily a thousand times, make tremendous economies.

Adjusting Furnaces and Mills to the Rhythm of Production.

Nice calculation of distances and exact adjustment of units to their productive functions mark every step in Gary's plan. Ore docks, furnaces, power plants and mills are knit into a harmony which excludes lost motion and squandered energy. Starting at the harbor side, no linear foot of space is wasted. The ore yards, hemmed in by concrete ramparts and spanned by the longest carrier bridges in existence

—498 feet, are wide enough to store a year's supply for the furnaces—2,900,000 tons for the first eight. In practice, there will be no need of such a mountain of material, but the width contributes to **straight line production**, minimizing lateral ore shifting.

Mere size, however, is not a fetish. That Gary will surpass all other mills in tonnage, in magnitude, in ultimate acreage, is accidental. What its builders sought everywhere and as a whole was efficiency, the economy of balanced production. Its mile of blast furnaces will be unique; but the individual stacks are not the largest in commission. They rate 450 tons: many in blast to-day exceed 600 tons. But Gary's creators, caring nothing for the grandiose, chose the smaller stacks because these had proved more dependable, manageable and profitable. Also because they offered the golden mean where strength of materials and stress of accident could be equalized.

The open hearths, again, though of uncommon size—fancy a kettle of blinding, bubbling metal 16 to 40 feet square—are not America's largest. By grouping fourteen into a unit and providing for six units—the four now ready or under construction have a capacity of 12,000 tons a day—Gary overtopped the world in size of units and total output. The purpose, however, was to provide the greatest number of furnaces one superintendent and his staff could manage in production.

Likewise the rail mill. In length it has no equal here or abroad—1,800 feet, to say nothing of the 1,400-foot group of soaking pits which it shares with the record-breaking billet mill adjoining. No lesser building would shelter the continuous train of rolls which will produce 100,000 tons of steel rails monthly—28,000 more than the South Chicago world's record. Here, also, size was incidental to the

most efficient and productive installation. The shorter the mill and fewer the stands of rolls, the more time the ruddy steel would waste on tilting tables and transfers, losing heat, losing precious seconds, whose saving would give larger output and lower costs.

The Best in Equipment was Chosen for the Plant.

Equipment was chosen by like standards—the mathematics of experience. Therefore the ore unloaders of one maker were coupled with the bridges and carriers of another, while the ore bins and conveyors of a third feed the skip hoists of a fourth—though any one of the first three manufacturers could have furnished the orehandling machinery complete. For the same reason cranes were purchased from three different makers, the electric motors bear the name plates of three rival manufacturers, while the light and heavy machinery were supplied by no less than a score of firms. The gas producers of the open hearths vary widely from the type at the soaking pits: but either is the design which fits best into the scheme of the unit supplied.

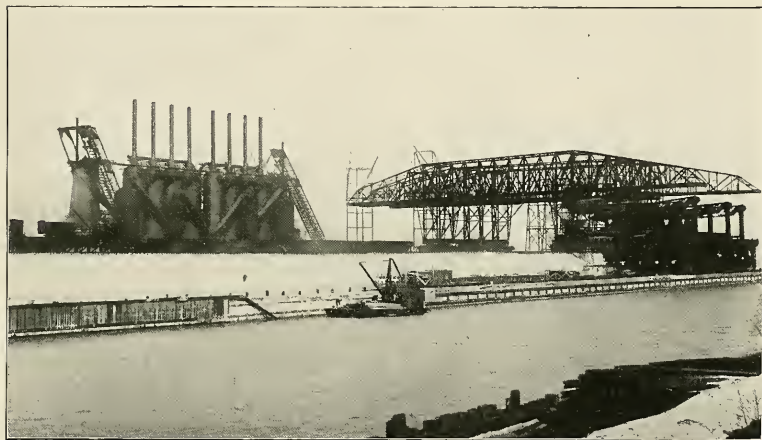
Mosaic of the most approved machinery and methods, Gary has adopted little without change, development or refinement. Gone is the epic day of steel making, when Captain Bill Jones refused big royalties for patent rights whose sale might endanger his own leadership in costs and output. The practice, the short cuts, the cunning inventions of a hundred mill captains have been available. Brought together, enlarged to the Gary scale and accelerated to the Gary pace, they produce its economies.

Speed and the elimination of human labor have been carried beyond anything steel makers have known. Re-

mote-control electric devices, automatic and interlocking, allow seven men to handle the forty or more operations in the rail mill at top speed yet without danger of accident. Two ingot "buggies," for instance, bring the flaming four-ton cubes from the soaking-pits to the first set of rolls. The thirteen pits cover 700 feet, yet one man out of sight in a gallery, by setting levers at the proper notches, can send a "buggy" to the chosen pit, stop it, start it when loaded and bring it to the first rolls without turning his attention from the important blooming operation.

worked out by the company's engineers, operating men and machinery experts would require many pages. In some degree they are the outcome of the company's policy of building its furnaces and mills **under the eyes of the men who must run them.**

Superintendent J. M. Gleason, Gary's head, was on the ground before the steam shovels. As the furnaces and mills took shape, they were put in charge of the bosses who will direct them, to check up the work of the contractors, to correct any tendency away from the solidly practical, to supply anything needed in design or



A portion of the great iron ore bridges and unloaders. Total length 495 feet, height 126 feet, distance between tracks 187 feet. Furnaces to the left, Harbor Channel in front.

To show how speed is served by this system of automatic control one example must do. The elevating table of the blooming train weighing 250,000 pounds is raised or lowered to the desired position **in two seconds** by the throwing of a lever, considering the mass moved a remarkable achievement—in which electric, pneumatic and hydraulic power are all employed.

To list refinements of this sort

equipment. This has made for many small economies—a pocket for broken coke above the skid hoists of the blast furnaces; steel ties in the soaking pit service tracks; aerial bridges to avoid time-losing detours; safety devices everywhere.

Economy shaped the construction program also. Excepting final efficiency, everything was subordinated to the end of production at the earliest prac-

ticable date—of putting the millions invested to work without delay. For months the interest on Gary's cost has amounted to six thousand dollars a day. Effort was concentrated, therefore. Furnaces and mills were begun according to a schedule which would complete them on the date they would be needed to fill out the steel making machine—but not before.

Four blast furnaces, two batteries of open hearths, the rail mill and a pig iron casting plant, with their power auxiliaries, make up the first unit now gathering headway. The furnace stacks and stoves, plus the gas-cleaning plant, were the slowest and most tedious construction. They were well up before the foundations of the open hearths were in. Next the harbor—the dredging of 1,500,000 cubic yards of sand—then the rail mill, the power station, the blowing and pumping plants, for all of which equipment had been ordered nine months before the buildings were erected.

The second quartette of furnaces will be "blown in" early next fall. Completing this unit will be a third group of open hearths, and a billet mill which will supply an axle mill and five merchant mills rolling 18, 14, 12, 10 and 8 inch bars. With the third group of blast furnaces—their foundations are now in hand—there must come new power, pumping and blowing stations, another group of open hearths and two plate mills, with an intermediate slabbing mill. The fourth unit, making up the tally of sixteen blast furnaces and rounding out the 4,000,000-ton mill, will follow fast or slow as the demand for steel dictates.

All the big work—big is the word for 2,100,000 cubic yards of excavation, 772,000 yards of concrete, 225 miles of railroad track, 60,000,000 brick laid, 144,000 tons of structural iron fabricated and erected, 80,000 tons of ma-

chinery created and installed—has been done or is doing by contract and the clock, without regard for seasons. The thousand retail jobs, for which specifications are not easily drawn, have been handled by the company's own organization of machinists, metal workers, electricians, masons. This insures dependable work at reasonable cost—the skilled men having been drafted from other plants—and familiarizes the organization with the construction and machinery it will have to keep in tune. Likewise the first buildings under roof were the boiler, machine, blacksmith, electric repair and other shops which will serve the works permanently.

Gary is building out of surplus earnings, but no dollar is planted until the season of its fruitage approaches. Indeed, some things necessary to the completed plant have been postponed until their need becomes more imperative. There's the million-dollar breakwater for the harbor, the contract for which has just been let. With South Chicago close at hand and offering a port in rough weather for Gary's ore freighters, the Indiana plant can wait without inconvenience for the fine days to summon its ore carriers.

The Gayley "dry blast" furnishes a striking instance of this postponing of non-essential, though valuable, installations. Tests at both company and independent furnaces have shown, apparently, that freezing the moisture out of the furnace blast increases output and saves fuel in important ratios. The process was experimental when Gary's plans were drawn; to hitch it to the stacks now would postpone production. It has been moved aside, therefore, until the absolutely essential in construction and equipment has been finished. The same rule postpones the installation of a Kommerz by-product coke-plant—now undergoing a decisive test at the company's Joliet mill.

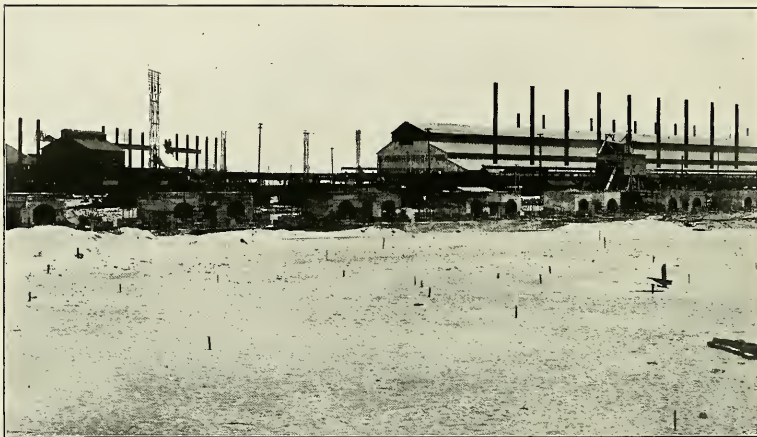
Gary the city is the final element in the mill's formula of economy. Its first function is to attract labor—skilled and unskilled—by reason of its metropolitan comforts and conveniences—its perfect sanitation, its reasonable rents, its low rates for water, gas and electric light, its parks and schools, opportunities to buy a home on terms even a pick-and-shovel man can compass. Living in such an environment, avoiding long car journeys morning and night, riveted to his job by his living conditions, every man will bring more bodily strength, a clearer brain and greater efficiency to his daily tasks. Duplicate these conditions and results for superintendents and foremen, and the expenditure of \$2,500,000 on the town, the building of 500 houses for sale and rent, becomes a sober "business proposition."

This is Gary today—the purpose already expressed in concrete and steel or scheduled for realization as soon as the builders can effect it. The larger design is in the lap of the coming decade. Given a demand to justify such expansion—here is no rivalry with existing mills, but provision for the future just dawning—Gary will surpass Pittsburg as a producer of steel. For the sufficient reason that open-hearth steel, the favored material for rails, bridges and structural shapes, can be converted and rolled at Gary cheaper than anywhere else in the world. Industry is as fluid as water, seeking the lowest level always of production.

Add Gary's strategic position, its transportation advantages, its unlimited room for extension, and you have the imperative considerations which

will plant the new mills of the corporation's subsidiary companies—as these are made necessary by the country's hunger for steel products—at Gary, where the basic material is cheapest and freight charges are nil. The same logic of saving will gather hundreds of independent factories using merchant steel—may even double the present project and bring forth a twin plant making 8,000,000 tons of steel annually, with miles of tributary work. Then Gary's circle of economy, its scheme of husbanding wealth otherwise dissipated in unnecessary operations will be rounded and complete. The sum of a thousand short cuts will be cast up and credited to America's resources.

Significant and conclusive as are the facts stated by the writer of the foregoing, the reader's thought is called to the fact that it is only half of the story, leaving unstated two great economic factors, to-wit: First, the transfer of new basic cost conditions from the Pittsburg region to the west and the great saving to the consumer of steel products on short freight shipments, and second, that the Gary location is practically the center of economical shipment and distribution of the Steel Co.'s products throughout the entire Mississippi Valley; surely so now over the tens of thousands of miles of a score of big railroad systems centering into the nearby Chicago, and from thence by two belt lines into Gary, and later through the great new water-ways to be constructed for very low cost shipment to the Gulf of Mexico and farther.



THE SECOND STAGE OF STEEL MAKING.

At the right is one of the 1,400 foot buildings housing fourteen open hearth furnaces. At the left are the power station and one of the blowing engine houses, tributary to the blast furnaces. In the foreground are the concrete piers of a second group of open hearths, while the stacks of a third group show in the background.

The financial editor of the Chicago Tribune recently spoke of the first of said two matters as follows:

The plant of the United States Steel corporation at Gary has begun turning out steel rails, being the first active operation of the plant. When the works are completed, the United States Steel corporation will, through plants now forming, control the steel business of the west. It will do this by making Chicago the basic point.

Pittsburg Now Basic Point.

At present Pittsburg is the basic point and steel products shipped to Chicago must bear the cost of freight in addition to the cost of the steel. For instance, steel products selling at \$32 a ton at Pittsburg cost the Chicago consumer not only the price of the product but the freight from Pittsburg to Chicago, which is 18 cents a 100 pounds, or \$3.60 a ton. It can be

seen that if Chicago be made the basic point, purchasers here would save the freight charge, getting their materials as cheap as they could be purchased in Pittsburg.

This difference of \$3.60 a ton will practically rule out all the independent companies of the east, for they have no plants in the west. The steel corporation will have one competitor here in the Inland Steel Company, a concern of respectable proportions, but the big eastern concerns will be handicapped the amount of freight mentioned.

Economies From Coke Ovens.

While it is true that the Gary plant must get its coal for coking purposes from the Connellsville district in Pennsylvania, the cost of transportation will be overcome by the ability of the Gary plant to save all the by-products resulting from the manufacture of coke. The steel works at Pittsburg are not

able to do this. The coke is made at the mines and the by-products are lost. The Gary plant will have every facility for utilizing the gas and selling in the market such by-products as it may not use.

Again, there will be a saving in the cost of transportation of ore. This saving will be the difference between the distance around the lakes from Duluth to Pittsburg compared with the distance from the mines to Chicago. Again, the Gary plant will be altogether modern, enabling it to keep manufacturing costs at the lowest possible level.

The "Meaning of Gary."

In the May, 1908 number of "Midland" Charles Pierce Burton wrote, in part, as follows, after having visited Gary a number of times to get the "local color":

The story of Gary, the industrial city which is being built to a predetermined scale and plan on the sandy shore of Lake Michigan, in northern Indiana, reads like a tale from the Arabian Nights. The experience of Aladdin with his wonderful lamp has come true in the twentieth century. Our modern Aladdin is the United States Steel Corporation. Unlimited capital is the "slave of the lamp" and is building not a single palace but a city of palaces, and building it where Chicago ought to have stood and might have stood had not human perverseness temporarily interfered with the purposes of the Almighty. What of that? A century is but a second in the creative day.

The purpose of this article is to consider the meaning of Gary rather than its physical construction. London has been a thousand years in the building. New York and Philadelphia and Boston are older than the nation. Com-

pared with these Chicago is an infant, giant though it is. But London, New York, Philadelphia, Boston, Chicago are growths. Gary is a creation. The goddess Minerva sprang fully armed and equipped from the head of Jove. Gary is springing from the brain of the United States Steel Corporation.

In the summer of 1906 there was a single building in the twenty-two square miles of scrub oak and sand now incorporated as the town of Gary. This lone building was the shooting lodge of a Chicago gun club. Today Gary has a population variously estimated at from 10,000 to 20,000 people. The shooting lodge has been torn down and even the topography of the country has been changed to make way for the encroachments of industry and commerce.

The necessity for Gary came when the Steel Corporation determined to concentrate its steel industry at the head of Lake Michigan, some miles from any human habitation. Manifestly the company could not employ 15,000 men in the wilderness, which it is planned to do, without providing the conveniences of life. A city was inevitable. The question was whether to permit a haphazard growth or to plan the city in advance and build it right.

One year ago Gary looked like a great military camp, a city of tents. Today it is a curious mixture of camp and metropolis, the like of which probably was never before seen in the history of the world. Tents and little boarded shacks are still to be seen in every direction, for Gary's immediate problem is to build houses fast enough to accommodate the rushing hordes of people. Much of the business, too, is conducted in temporary quarters. On Broadway, for instance, a tiny shack, hastily constructed and covered with tar paper, bears the imposing inscription, "Gary Tribune," with the

added information that further down the street a handsome building is being constructed for the newspaper's permanent home. In strange contrast with this primitive structure stands Gary's new \$150,000 hotel, and the First National Bank building, classically ornate, both models of their kind.

product shipped back again to Chicago. The Pittsburg mills necessarily must be more or less antiquated, entailing a greater cost of manufacture per ton than the new mills now being constructed at Gary, along the most advanced lines known to science. It does not take a student of economics to



GARY'S FIRST LAUNDRY.

One of hundreds of scenes only two years ago.

Whatever the present purposes of the Steel Corporation may be, the creation of Gary is a death-blow to the supremacy of Pittsburg as a steel-producing center. Gary, whose harbor will receive the company's ore-laden vessels direct from Lake Superior, has at its back door the unlimited coal fields of Ohio, Indiana and Illinois. Moreover, Gary practically is Chicago, and Chicago is the greatest distributing center of the steel product, with water outlet to the Atlantic ocean, and ultimately to the Gulf of Mexico. To reach Pittsburg, ore from the Lake Superior region must be taken to Cleveland by boat and from there shipped by rail to the mills, and the finished

foresee the natural outcome of such unequal competition.

Gary means that in the United States, commercial and industrial supremacy has shifted to Chicago and the middle west, following the center of population, which is only 123 miles from the steel city. Chicago—and what is true of Chicago also is true of its great suburb—in all this country is practically the center of population, of investment in manufacturing, of banking capital, of farm values. In ten years its bank deposits, the gauge which shows the pressure of thrift and enterprise, have increased more than 200 per cent. The drift of commerce is irresistibly toward its doors.

Gary means the perfection of the great economic movement toward consolidation and elimination of waste in every form, which forever will make the beginning of the twentieth century notable.

It means a greater Chicago, reaching out from its present confines, through its huge natural workshop, known as the Calumet district, once the bed of Lake Michigan—a huge inland seaport, both by way of the lakes to the Atlantic ocean and the Mississippi river to the Gulf of Mexico; commercially one gigantic city.

The old ways are gone forever. Gary will set the pace for future industrial development and industrial life. It is a far cry from the individualism of the primitive order, where every man's household was a workshop, to a United States Steel Corporation giving life to one million people; to Gary, in which the thought and ambitions of this corporation have materialized. Denounce the so-called "trusts" as we may; rail at consolidation and corporate greed; these things are evil only in their abuse. These great consolidated interests are a vital part of the social



BINZEN APARTMENTS.

Gary needs a thousand of them—and, of course, will get them.

It means that successful movements in the direction of beauty and cleanliness in city building must be economic rather than esthetic in their origin. Gary will be a clean city and a model city, free from smoke and soot, because to make it so will put dollars into the treasury of a money-making corporation.

order; they are an evolution, a result of natural law, and inevitable.

In Gary we see the trust at its best—as a creator in a large sense. Through the eyes of the imagination we catch distant visions of a future greatness for this mighty central west, which would have staggered the founders of the republic.

In the March, 1907, number of "System" Mr. Daniel Vincent Casey wrote, with his usual force and intelligence, an article on Gary, entitled **Making A City to Order**, from which the following are extracts:

Up through the Hoosier sand-hills where duck-hunters set blinds a year ago, the first furnaces of the greatest steel mill ever conceived are pushing their Titanic million-dollar heads. Two miles inland, created by the same imperial order, the flat city of Gary is rising among the scrub oaks.

Town and plant have only one purpose—to make steel in greater quantities and at lower cost than it is made anywhere else in the world. Here is a city-to-be whose every detail answers to the call of business.

That is a plain statement of the boldest and best-imagined industrial project ever launched.

How it is taking, shape at Gary, where Lake Michigan crowds farthest south into Indiana—how three thousand builders are making mock of winter with dynamite and parboiled concrete, wind-shields and other cunning devices—how waste land three miles from a postoffice has been given a value of \$140 a front foot—these are details of progress well worth the telling.

But, like the stranger who needs blue-prints to grasp the relations between this yawning excavation and those giant towers a mile eastward, the man who would understand Gary and the lesson it holds for every manufacturer must begin by charting the ideas, the motives behind it.

What is the reason for Gary? What is the plan of this \$100,000,000 made-to-order, city of concrete and steel with its twelve square miles of raw material and its ultimate yearly production of \$70,000,000 in new wealth? Why was it set down on a remote shore, five miles from a harbor, only a

dozen miles from another plant owned by the same corporation and devoted to the same ends? Why was it deemed necessary to tie up millions in a town which is costing \$15,000 a day to build, whose first "sub-division" will have twenty-seven miles of paved streets, with water, gas and electric service mains, as well as sewers, available to every lot?

How Every Question That Arose Was Analyzed.

Answer to these questions involves the strategy and mathematics of "big business"—here applied with a knowledge and understanding of conditions and resources possible only with an organization of specialists. For no element which would contribute to economy of manufacture and maximum of output was neglected in the placing and designing of this Gary plant. Each was analyzed—assembling of raw materials, distribution of product, existing and future markets, labor supply and efficiency of workmen, cost of site and provision for unlimited expansion—and the plan was developed with the care and certainty of a chemist compounding a familiar formula. So far as it is possible in a human undertaking, chance was eliminated.

Assembling of raw materials and distribution of product were matters of transportation.

Here was iron ore in the Superior ranges, coal in southern Illinois and West Virginia, coke in West Virginia or Pennsylvania, limestone in Michigan or Illinois—where could they be brought together with least cost and the resulting steel distributed with greatest ease and economy?

Plainly not at the coal or iron mines, each remote from markets and from all the other sources of raw material, and unable to guarantee winter deliveries.

Some point midway, then, where lake carriers and railroads could meet at the threshold of the biggest market and lay down their ore and fuel together without trans-shipment.

The Causes Influencing the Choice of a Location.

Look at the map and you will see why choice of location for the new plant was limited to Chicago or its vicinity. The central market of the richest industrial region of the country, the railroad hub of the continent, itself a voracious consumer of structural steel, and the point where the shortest lake journey could be linked with the shortest haul from Virginia coke ovens and Illinois coal shafts, it had the added advantage of being the supply focus of the corporation's system of subsidiary mills—manufacturing sheet steel, tin plate, bridges, structural iron, wire and wire products in a continuous chain of twenty plants in Ohio, Indiana, Illinois and Wisconsin. Growth of this inter-company market and the enormous demand of western lines for rails and bridges dictated the location of the plant within the Chicago railroad zone, where rates would be most advantageous.

Choice of a site was not so easy. Not acres but square miles were needed to accommodate the projected works, with their storage and railroad yards. The company's South Chicago plant was crowded for room, and this new mill was to be on an immeasurably vaster scale. It was building for the century, and history commanded that no limit be placed on its expansion.

Within the city's boundaries not even a square mile was available. And the company had another cogent reason which will be elaborated later for desiring to escape from the city and its influence altogether. Therefore Gary.

The Transportation Facilities Available in Gary.

Twenty-six miles from the mouth of the Chicago river, it offered all that the company's business generals and factory engineers could demand. Land was cheap—and approximately twelve square miles were purchased before the corporation's intentions were divulged. Six miles of lake frontage, with five eastern trunk lines crossing the tract—two of them distinctively coal roads—made easy the wedding of lake and rail carriage for the chief raw materials, and furnished outlets for steel to mills and markets east and south.

For western and northern shipments, facilities were equally ideal; the corporation's industrial road, the Chicago, Lake Shore & Eastern, touched Buffington at the northern verge of the tract. Extended it would connect the plant through the "outer belt line" with every railroad leaving the city, and would bring the new mills inside the Chicago rate zone. In fact, the Gary site held one transportation advantage a city location could not afford—connection with the "outer belt" would preclude delays in terminal freight yards and insure prompt dispatch even in seasons of greatest congestion.

What Made the Site of the New Town Advantageous.

Physically the site was admirable. Half a mile off shore, the lake was deep enough to float the company's biggest ore-carrier. Construction of a harbor, then, was a mere matter of excavating a slip, building a break-water and dredging a channel—all in sand, which is the easiest of materials to move.

Yet that sand had the merit of

packing so hard three feet below lake level, that piling was unnecessary for the gigantic concrete monoliths of the furnace foundations. Hydraulic jets had even to be employed in driving the piles for the temporary retaining walls of the slip.

Nowhere is the canny wisdom of the company's engineers more evident than in the decision to extend the works towards deep water instead of bringing deep water in to the mills.

Reference to the ground plan will make it clear that the final third of the plant will be erected on "made land" filled with sand from excavations and furnace wastes.

Besides the first purpose of approach to deep water, this method furnishes a convenient "dump," provides the necessary width of site otherwise denied by the position of the Grand Calumet river and adds hundreds of valuable acres to the company's property.

Site, room for growth and adequate transportation assured, the company's strategists turned to the important twin problems of labor supply and efficiency of workmen, both questions vital to the largest success of the mills.

Starting a plant five miles from the nearest town, it was inevitable that the thousands employed would settle nearer or find other jobs. Weighing the conditions, the management determined to shoulder the burden of building the prospective city.

Handling the Vital Problem of Labor Supply.

First, to insure an attractive town, reasonable rents and municipal comforts and conveniences as the means of binding employes permanently to the works, thereby increasing individual efficiency.

Second, to combat the hostility of trades unions—the Gary mill is to be an open shop and this was the reason already mentioned for wishing to establish it outside Chicago—by offering material advantages likely to weigh against labor anathemas. Of these sixty-cent gas, water and electric light at parallel low rates, and opportunity to buy a home on terms possible even to day laborers are the most urgent.

A third motive lay in the company's desire to colonize its superintendents, foremen and office employes near the works—a thing to be realized only by providing quarters as desirable or even better than they could find in the neighboring towns.

Philanthropy, then, had little part in the founding of Gary, the city. It is a "business proposition" exploited as town-sites usually are, as well as a practical recognition of the truth that good drainage, comfort and accessibility in your workmen's homes are reflected in increased factory efficiency. Saloons and speculators are barred by clauses in the deeds, because liquor saps the energy of workmen and speculation would retard the sale of the company's lots.



ONE OF THE CORNER RESIDENCES (JACKSON STREET).

The Regulations Under Which Gary Is Being Built.

A "model town" in the best—the municipal engineering—sense, Gary differs from Europe's "garden cities" and America's Pullmans by putting a premium on property-holding and eliminating company control of municipal affairs. It has its council, mayor, school board, political parties, and it will come as near self-government as the average American town. Barring the restrictions in the deeds and the supplying of water, gas and electric current in bulk to the municipality at about cost—solely to reduce living expenses and so anchor its employees to the work with the chains of self-interest—the company's connection with the town will cease when its lots are sold.

Many of the readers, especially

those who contemplate the possibilities of future residence in Gary, will be interested in the following condensation of an ably written article by Mr. Graham Romeyn Taylor, of the editorial staff of the magazine, *THE SURVEY*, formerly "Charities and the Commons," appearing in the April, 1909, number, and the writer inserts the same even though something elsewhere said in this book is repeated.

Accustomed as Americans of this day are to rapid accomplishment, not one who visits the suddenly created town of Gary at the southern tip of Lake Michigan fails to experience a new thrill of amazement. The story of this marvelous achievement of the steel industry has been frequently told. The purpose in these pages is not merely to repeat the wonder tale of Gary's magic growth—steel plant and town—but to present a brief sketch of the

framework and structure of the place and its rising social agencies, with some impressions of how these serve the needs of the rapidly gathering population.

Gary is not quite three years old. In April, 1906, the region was a waste of rolling sand dunes sparsely covered with scrub oak and interspersed with ponds and marshes. To-day there is a great steel plant covering approximately a square mile, equipped with a made-to-order harbor for the great ore freighters, and a town of 12,000 inhabitants, with fifteen miles of paved streets, twenty-five miles of cement sidewalks, two million dollars' worth of residences completed and occupied, a sewer system, water and gas plants, electric lighting, a national and state bank, six hotels, three dailies, and one weekly newspaper, two fine public schools, several substantial church edifices, ten denominations represented in church organizations, and many well appointed stores and shops handling practically all the commodities that a good sized city usually needs. There are forty-six lawyers, twenty-four physicians and six dentists.

Situated on the main lines of five great trunk railroads, no less than fifty trains a day stop at Gary, to say nothing of the frequent service by the interurban trolleys.

This mere enumeration is enough to show an astonishing growth from the wilderness of three years ago. A visit proves far more convincing. A walk two miles along a fine business street a hundred feet in width, well paved with granitoid, lined on both sides with eighteen foot cement sidewalks and flanked by well built fire-proof business buildings; to be told that no more land is for sale on this thoroughfare; to glance up the side streets and see block after block of attractive residences; to watch the busy crowds hurrying back and forth on Broadway;

and, above all, to talk with energetic business men of the place, who look you straight in the eye and quietly assure you that in a few more years this new capital of the steel industry will surpass Indianapolis as the largest city in Indiana—well, merely to spend a day in the place is to find incredulity vanishing as completely as the wilderness itself.

Turn northward, retrace your steps, and the underlying reason of your newly acquired faith, the economic basis of it all, takes definite shape before your eyes. Here is the real fact which gives solid substance to the community you have thus far accepted because your eyes told you to, but which until now you could not explain. At the northern terminus of Gary's Broadway is the entrance to a steel plant destined soon to be the largest in America. Here the finger of unerring calculation has located the geographical spot where greatest economy dictates the assembling of raw material, and the center of distribution for finished steel. Belief in Gary and its future as a community, then, rests upon the fundamental belief of the shrewd and farsighted men directing America's steel production, that this is the place at which to concentrate in one great plant the sum of all the best methods and processes elsewhere demonstrated—that here is the spot to embody the present acme of efficiency and economy in the making of steel. The thoroughness of this belief may be seen in the fact that, acting upon it immediately, the United States Steel Corporation without hesitation has poured out during the last two years \$42,000,000 and soon will have spent a total of \$75,000,000 to build its plant, create a harbor for its ore and fuel boats, and provide a town for its army of workers.

Even these millions, spent "to clip a few vital seconds from the birth throes of a steel rail," as a recent writer has

put it, are said to be only a half or a third of the total which will eventually be invested to place this new Pittsburg on its level of maximum output.

shops of the Chicago, Lake Shore and Eastern Railroad—a Steel Corporation road. Extensive sites for large plants of the American Car and Foundry



FIFTH AVENUE EAST FROM WASHINGTON STREET IN NOVEMBER, 1908.

The temporary paving in the center is about to be removed for the construction of the street car line over the entire length of Fifth Avenue.

The belief of the United States Steel Corporation in this new location for great industrial development is measured not alone by the great mill already beginning its work. To assure for decades to come space in which this mill and its various departments may expand, to provide sites for many subsidiary manufacturing plants which make large use of steel, and to make some provision for the population of workers, a great tract of nearly twenty square miles has been acquired, the shore frontage on Lake Michigan being eight consecutive miles. Already located and in operation on this tract are the works of the Universal Portland Cement Company, and the repair

Company and the American Locomotive Company have been selected, and in addition to these the American Steel and Wire Company, the American Bridge Company, and the American Tin Plate Company are expected soon to become members of this great industrial group.

In the various parts of the steel plant itself at least 14,000 men will be employed. The combined working force of the establishments now constructed, or whose location is practically determined, is likely to number well up toward four or five times that total.

So much for the industrial basis underlying Gary as a community. The conditions of work, the ever increasing

part played by machinery, the lessening of manual toil, the greater precision in handling material and directing processes, the better protection of the workman at his work—all the provision for this interplay of hand and mind with machine must here be left without mention.

What of Gary, the town, and the community of people? To sketch its rise and structure is the purpose of this article. To readers familiar with the Pittsburg Survey and its thorough-going method, the present article will be seen to be merely a fragmentary suggestion that here at Gary is the opportunity for a striking comparative study. The Pittsburg Survey was a close range analysis of the social, civic, and industrial conditions of the Pennsylvania steel district. It not only "blue-printed" the present Pittsburg region but in some measure traced the incoming flow of peoples and the gradual evolution of conclusions. It took account of a community wherein the steel industry grew piecemeal by adding this part and that process—its growth continually subject to the more or less rigid conditions imposed by a long established city. The growth of the various plants was, in most cases, not so rapid as to require any special housing provision other than that which haphazardly might be supplied from time to time by the company or outsiders. In some of the plants themselves, the installation of larger and larger machinery and more extensive trackage was not accompanied by any increase in the area covered. Under these conditions the leeway and "give" were wrenched from the human element. If tracks were needed in a passageway previously used only by workmen afoot, the tracks came in,

no additional passageway was provided, and the workmen began dodging the shrieking little locomotives as best they could.

Here in Gary all is different. Planned at the outset on an enormous scale, it was unnecessary even remotely to consider space limitations. The visitor is impressed with the elbow room, and the absence of a dingy clutter such as characterizes the average Pittsburg steel mill. Men have light in which to see their work, room in which to do it, and an orderly arrangement that means as much for safety as any of the protection devices which have been installed.

In Gary, the town, too, there was absolutely unhampered opportunity to arrange the streets, provide the fundamental necessities of community life, determine the character of its houses and predestine the lines of growth, all in the best and most enlightened way. The growth of the town through the various stages of sand dunes, tents and shacks, the latter made out of boards, tar paper, canvas and anything else at hand, to the present community as briefly outlined at the beginning of this article, is no less bewildering—and in many respects is even more interesting—than the creation of the great mill. The Gary of to-day, with all its substantial buildings, shows many evidences of the successive stages of its development. Many of the shacks hastily thrown together are still occupied by the workmen and immigrant laborers who have been engaged in the construction, and several tents, reinforced by a few boards and a little banking of sand against their walls as a feeble protection against winter cold, are yet serving as habitations.



STEEL COMPANY'S GENERAL OFFICE BUILDING

and viaduct for main entrance to the works at the head of Broadway.

The officials of the Steel Company say frankly that the building of the town was incidental, that their main concern was to construct a steel plant, and that city-making was a side issue into which necessity alone drove them. They must have a place for their employes to live. This could not be expected to develop at all proportionately to the sudden need, unless the company assumed much of the responsibility. Moreover, a haphazard town would certainly prove an inefficient one in serving the daily life and needs of the men whose brains and muscle mean the real ongo of the mill. An inefficient town, therefore, in some degree would throw a paralyzing spell into this place designed to be the very citadel of economy and efficiency in steel production. A wholesome town was recognized as essential.

The Gary Land Company, a subsidiary corporation of the United States

Steel Corporation, was formed to secure the great tract of land to serve the present and long future needs of steel plant, town, and subsidiary manufacture interests. Upon this company was thus thrown the work of making the town. The holdings of the land company form a strip along Lake Michigan, extending from Indiana Harbor eastward some eight miles, if land now to be acquired is included, and averaging two miles in width—about two and one-half miles wide at the site of the plant and town. Almost in the center of this strip is the mill. At the latter's eastern edge is the harbor slip, 250 feet wide, extending in from the shore, affording berth for half a dozen 12,000-ton ore freighters, and equipped with a 750-foot turning basin at its inner terminus. Just west of the mill are the repair yards and shops of the Chicago, Lake Shore and Eastern Railroad. Adjoining them on the

south is the site selected for the great plant of the American Car and Foundry company. East of the mill and just across the harbor slip extensive coke ovens to serve the mill are contemplated. South of these and south-east of the mill is the site determined within the last few weeks for the big works of the American Locomotive Company.

the mill and other plants of the town.

It is interesting to learn of the pains the company is taking to find out by experiment what species of trees will prove most satisfactory in Gary's sandy soil. The citizens of the town, too, are alive to the desirability of tree planting. With more zeal than reason they recently agitated for an ordinance making tree-planting compulsory, but



VAN BUREN STREET NORTH FROM 5TH AVENUE IN 1908.

Directly south of the mill is the so-called subdivision No. 1, laid out by the Gary Land Company. The company itself has erected 506 dwellings and is selling lots for business and residential purposes, subject to certain restrictions which will be detailed later. Subdivision No. 1 is the only part of its holdings which has been plotted into lots by the company. Adjoining subdivision No. 1 on the south are smaller tracts owned by real estate dealers, who are rapidly selling the lots they have plotted. It will be seen at once that Gary subdivision No. 1 is the most central position with reference to

readily saw the wisdom of delay, pending the experiments of the company and the working out of some scientific and harmonious scheme.

The whole street scheme of Gary—in fact the whole plan of the place—hangs on the main thoroughfare, Broadway. The idea of a civic center with a grouping of public buildings seems not to have occurred to those who designed the town. With the steel plant foremost in mind, and the town incidental, it is natural that the main fact in Gary's town plan is a broad street leading straight south from the mill entrance. Already it is paved three miles

and more. Up this great artery in the morning, and down it at night, sweep the throngs of workers.

Efficiency in town, it has already been said, was recognized as a factor in the efficiency of the steel plant. This town efficiency will be made apparent many times in this article.

Broadway, which is 100 feet wide, and Fifth avenue, which crosses Broadway at right angles, in the northern part of subdivision No. 1 and is 80 feet wide, are the two principal streets plotted for business purposes. The next streets to Broadway, paralleling it on east and west, are also reserved for business. Excepting Broadway and Fifth avenue, all streets are 60 feet in width. Along all streets but the four business streets a building line of 20, 25, or 35 feet is established. This has been observed in the building of the company houses, and each contract for the sale of a lot stipulates its observance in any building to be erected. An alley, in most cases 30 feet wide, runs the long way in the center of each block. The lots in the residence districts are mostly 30 by 150 feet. A few are only 25 feet wide and the length of some is only 125 feet. It will be noted that this allows for a good sized back yard, but that the space between houses is not likely to be considerable. The proportion of a lot which may be covered by buildings, and the number of buildings to be permitted on a lot, do not seem as yet to be worked out in the building code of the town. Lots on the business streets are uniformly 125 feet in length. On Broadway and Fifth avenue they are 25 feet wide; on the two other business streets paralleling Broadway they are 30 feet wide. The typical block is 600 feet in length, permitting 40 lots of 30 feet width in the residence district. Street paving is granite on two miles of Broadway, and concrete, brick or macadam, on the miles of other streets already paved.

In the provision of the fundamental utilities to serve the necessities of the population, efficiency and amplitude are manifest in marked degree. With no permanent population yet on the ground and even before the streets were laid, the company immediately constructed sewer and water systems large enough for years to come. Of primary importance is the fact that all sewers and water mains are laid in the alleys, so that in the future there will be little need of tearing up the streets to make repairs or new installation.

The cost of sewers and paving has been distributed over the lots in the subdivision, being included in the price of each so that there is no assessment for these improvements. The sewer system can readily be extended to the subdivisions not owned and developed by the company, assessment on the lots defraying the cost.

Water supply is furnished by the Gary Heat, Light and Water Company, another subsidiary company of the steel corporation. It furnishes also, as its name implies, electric lighting and gas. There is a provision that ownership of these public utility plants may be acquired hereafter by the city. For water supply a three mile tunnel six feet in diameter extends a mile and a half into Lake Michigan. Its shore end is at the pumping station—this and a 500,000 gallon water tower in the park site west of Broadway. Already twenty-five miles of mains have been laid, and the capacity of the system is 20,000,000 gallons a day. To appreciate the advantage in town efficiency, as contrasted with some other localities where the United States Steel Corporation acts as landlord, compare with this water system the pump in Pittsburg's "Painters Row," the only source from which no less than 568 people can get water fit to drink.



BROADWAY NORTH FROM EIGHTH AVENUE IN NOVEMBER, 1908,

since which date the car line center space has been paved. There are arc light lamps at each street crossing.

That the "Painters Row" pump is not the only feature of older steel towns upon which Gary marks improvement is already apparent to readers of the Pittsburgh Survey articles recently published in this magazine. Perhaps no part of Gary's development is so immediately pleasing as the houses. The Gary Land Company, as already stated, has erected 506 dwellings. Approximately 250 more have been built by individuals who have bought lots in the company subdivision. Instead of rows upon rows of exactly similar—and usually ugly—houses, which generally come to mind at the mention of "company houses," there is in Gary an admirable diversity of architecture. Combined with this, however, is harmony in the general effect, due no doubt to the fact that the whole work was in the hands of but two architects.

The cheapest houses are in the northeast corner of the company subdivis-

ion, locally called "Hunkyville," where the lowest paid immigrant labor lives. The next better houses are in the northwest corner, known as "Kirkville," and are occupied almost entirely by workmen in the repair shops of the Chicago, Lake Shore & Eastern Railroad nearby. The rest of the houses are scattered over the central portions of the subdivision, those to the west of Broadway being somewhat better than those to the east. The quality of dwellings east of Broadway, however, is likely to be improved, now that the American Locomotive Company's works are to be built just east of the subdivision. The nearest available location for the dwellings of officials and the more highly paid clerical force will be the eastern portion of the subdivision. It is likely that the fifty "double drygoods boxes," as Hunkyville houses are called, will be moved elsewhere.

With evident intention of avoiding the mistakes of Pullman, the company announces its desire to sell lots as rapidly as possible, so that any paternalism it has exercised may speedily come to an end. The price of the company's more advantageously located lots is still kept below that of lots outside its subdivision. Great care, however, is used to see that they do not fall into the hands of speculators who will hold them vacant. It is the desire to make them available for employes of the company.

The agreement concerning the sale of a lot stipulates that the plans must be approved by the agent of the company, that the building must be completed within eighteen months, that it must be built back of the prescribed building line, and that no liquor is ever to be sold on the premises. Exception to the latter provision is made in the case of a few places on Broadway. A number of saloons had sprung up south of the company subdivision, where there are no restrictions regarding the sale of lots. All saloons in the town of Gary, however, were closed on April 1, 1909, when the region became "dry territory."

Gary's people—who are they? The study of Pittsburg's population and whence it came was compared to an analysis of a river's currents. At Gary such a study would be like cross-sectioning a water spout. Perhaps the writer's own experience was characteristic. The first word spoken to him in Gary after he alighted from the train, a complete stranger on his first visit, was by a foreigner inquiring his way. At a cafe on Broadway which looked as if it had been in good running order at least a year, the waiter, in response to a question, said that the place had been open five days, and that he himself had arrived the night before last. An "oldest inhabitant"—about three years in the town—describing the

influx of people said they seemed to sprout suddenly up out of the ground.

The growth of Gary's population may be divided into two main stages, corresponding to the development of the place. First came the construction crowd. While a large number of these are still on the ground, the transition to the permanent working force of the steel plant is now taking place, the mill having recently started operation. This change, however, will not be sudden, for much construction work yet remains to be done. From the beginning there has, of course, been a steady growth in the element identified with the development of private business activities, etc., and in the number of lawyers, physicians and members of the other professions.

The construction force was brought in principally by contractors. With its make-up and living conditions the steel company had not much to do. A large proportion was made up of the lowest paid immigrant labor. While the construction period has lasted many months, it of course has not been long enough to warrant the provision of any but the most temporary sort of shelter.

The transition from construction gangs to permanently employed steel workers means that from now on the proportion of low-grade foreign labor will diminish. The great inadequacy of present housing for the lowest paid labor may be thus in some measure accounted for. It must be said, however, that housing facilities of all sorts are not sufficient; a situation due, it is probable, not so much to the failure of any one to meet responsibilities, as to the plain fact that it takes time to build houses.

The extent to which the population varies from that of the average family community may be seen in the fact that ordinary computation from a knowledge of the number of men over

twenty-one years of age, would give Gary approximately 30,000 population. This fact is also significant in connection with predictions on the probable growth of Gary's total population, which should increasingly tend to reach the normal proportion to men of voting age.

Gary's vote in April, 1907, was 29; in November, 1908, eighteen months later, it was over 2,000. At the start there were barely enough voters to organize town government. The present Gary is a place of well informed and alert citizenship. Already the various functions of the modern city are being well organized. A police force came early. The conditions in the pioneer days of this place, just twenty-six miles from Chicago's downtown, were startlingly like those of the western frontier. The region had its traditions; it was where the police of Chicago a few years ago had pitched battles with the notorious "ear barn" bandits," who were eventually captured and hung. The earliest construction crews had their quota of ruffians. And the health emergencies of a mushroom community needed strong authority. Curious enough most of the other municipal functions were provided before the fire department, which, at its establishment of a few months ago, was urgently needed to bring down insurance rates. A fine building is just about to be constructed for these two branches of the city service. For some time to come it will also house the other executive offices of the local government.

Schools were early provided. The first ones were portable frame affairs, which met the need during the construction of the fine two-story and basement Jefferson School which the company erected at a cost of \$80,000. The Emerson School, designed by the architect of the famous St. Louis

schools, is nearing completion at a cost of over \$200,000. A parochial school costing about \$50,000 is soon to open its doors. The pupils in the public schools numbered over 1,000 at the close of school last spring. Thirty-six teachers are now employed. The new Emerson School will have a playground of about an acre and a half. The Jefferson School, while it has no playground adjoining, is but half a block from a park space.

Working in close co-operation with the schools is the recently organized public library—perhaps, in proposed scope, the most progressive civic institution in Gary. An interesting commentary on the town's growth, and a circumstance which doubtless has something to do with the fine co-operation between the library and the schools, is the fact that the library could not be organized under the general library law of the state, which requires that the five library trustees must have been residents of the place for five years. There being none with this qualification, the library was organized under another statute allowing it to be conducted by the school authorities, who on this account are authorized to levy a larger tax. Housed at present in a store and basement, the library maintains an attractive reading room, and in the basement evening classes for immigrants studying English, with an instructor furnished by the schools.

Branch libraries are to be in every school, and a progressive service in this connection will be rendered in teaching the children and giving them experience in the use of library facilities. For certain periods each week the children of each grade will be placed in charge of the branch librarian. The importance of this as a stimulus to continued use of books after school days are past, is apparent.



THE JEFFERSON PUBLIC SCHOOL IN FEBRUARY, 1908.

Schools, and library, too, are to be used as social centers. The former have gymnasiums, natatoriums and manual training, and each day pupil keeps his books in lockers so that the classrooms may be freely used at night. The librarian is now planning what the permanent library building shall provide. In addition to the ordinary library facilities he proposes baths, bowling, billiards and pool, and a gymnasium available also for dances. If these features are included, Gary's library will be the first in this country maintained solely by public funds, to provide such social and club facilities. The few which now make such provision are located in industrial towns where, in addition to public funds, a scheme of membership fee is in force or the industrial concern gives an endowment or meets the deficit.

A small hospital is at present provided by the Sisters of Mercy. This year, however, the steel company will erect a large one costing \$200,000 for the use of its employees. It will be located on the east side of Broadway,

near the entrance of the mill. Two parks have been plotted, one four blocks west, and the other two blocks east of Broadway. The former is four blocks in area and the latter two. Upon the larger one the water tower and pumping station have been erected. The tower is at present built entirely of steel, but the design has been made to sheath it attractively with brick and stone.

The prime economic importance of extensive harbor and dockage facilities for the steel plant and all the subsidiary manufacturing interests is well recognized. But the most serious and immediate consideration ought to be given to the question, whether some portions of the lake shore, somewhere along the ten miles, cannot now be reserved for park purposes. The region is one of great geological and botanical interest and its wild and distinctive scenery has for years attracted groups of nature lovers from Chicago. From Chicago's standpoint, therefore, it is desirable that regions of natural beauty near her boundaries be prescribed

for the use of the great and growing metropolitan population. But above all, from the standpoint of the people living in Gary, still more especially for the numbers who are yet to come, this question is urgent. It has been said regarding this very situation that the steel companies "are not in the summer resort business." And from authoritative sources has come the information that the matter of the people's access to the lake was considered, but that it was not thought "safe for future industrial expansion" to set aside specific portions of shore for park purposes. The intention of these paragraphs is not to argue the point—the writer's knowledge of the factors in the question is slight indeed—but merely to direct some attention to this problem confronting Gary, the community. This is the sort of problem, moreover, to which frequently people do not become aroused until too late. Considerable agitation of it is already reported to have arisen among Gary's citizens. May it be co-operatively taken up by all interests and solved satisfactorily and speedily.

This sketch touches only the more obvious points to be observed on the surface. It does not even cover all these. For instance, the progress being made by religious organizations could be interestingly detailed. And one of the many community problems scarcely mentioned is the need for a far-sighted look toward an eventual grouping of public buildings. On the industrial side, it would be of the greatest interest to study wages in relation to the standard of living. Grant that the latter is exceptionally high—housing and fundamental utilities bear this out—what are the costs in relation to wages?

Gary, by reason of its industrial significance and the marvelous growth of its community life is a marked place for the student of social, civic and in-

dustrial advance. If these observations and impressions might suggest a more careful survey, they would more than fulfill their purpose.

PRESENT SELLING VALUES OF GARY REAL ESTATE.

This is a difficult subject for any one, however well informed, to speak intelligently about. Of course, the "selling" value of anything is what it sells for in money. This depends much upon the **buyer's** personal equipment and knowledge, and how he is situated as to contact with the seller. This "buyer" might be the one who furnishes the purchase money, and might be his better equipped agent in the matter. Although an investor may have to pay more for Gary real estate in installments than he would in all cash, this far from means that he should not buy at all unless he has all cash.

What is the rightful selling value of a lot or tract depends on many things, often different in different cases. Sometimes these conditions are not known except to the well posted buyer. For instance, there are subdivisions in and about Gary in which each of perhaps a hundred scattered lots have been sold to some one of a class or nationality whose improvements and occupancy will injure instead of help any of the unsold lots.

Again, there are many cases in somewhat outlying localities where the buyer is told there will soon be quick and convenient transportation, the truth or probability of which, often very material, he cannot rely on. The same is true of assurances of the quick coming of sewers, water, school facilities, etc., where they do not now exist. Such a buyer can get valuable help from some one of the many others than the seller, who **knows** much about such things.

Then there are matters that enter into the **actual** values of real estate in any city or locality which a buyer or his representative could weigh after seeing or otherwise knowing them. A residence lot between two nice residences already built is worth more than a lot, even only one hundred feet away, the surroundings of which are not determined. A business lot between a laundry and a livery stable, present or to be, is not worth as much as one between a store building and a bank building.

A residence subdivision adjacent to an undrained marsh, freight yard, planing mill or a coal yard, etc., is less likely to produce profits for lot buyers than if better surrounded.

Then again, the value of a business lot is somewhat effected by what it will earn. A corner on Broadway was, last fall, valued at \$500 a front foot for the reason that the buyer had figures on the cost of an improvement and rental offers from responsible tenants that would pay good income on the cost of the ground and building. Generally speaking, residence lots within six blocks of the business center of Gary can be had for about \$600 per lot and as one goes farther, for \$500, \$400, \$300, etc.

Business lots along the north two miles of Broadway, which is the improved, built-up portion, can be bought near the business center for about \$300 per foot; a half mile farther south for about \$250 a foot, a mile and a half to two miles south, from \$100 to \$150 a foot. In the Steel Company's plat there is no chance to speculate on vacant property, business or residence, as they sell only for prompt improvement.

As to acre tracts, there are a few small ones that can be obtained within a mile, or a mile and a half, from the business center for from \$1,200 to \$2,000 per acre and about a half mile farther away, for from \$800 to \$1,500 per acre, and there are still, farther away, nice acre tracts of from five to twenty-five acres that can be bought from \$500 to \$1,000 per acre, depending upon elevation, drainage, transportation, schools, surroundings, etc.

It is quite feasible for several friends to form a small syndicate, furnishing an aggregate of a few thousand dollars and buy a few acres at very much less than individual lots prices. In such cases, the title can be held jointly, or the tract divided up into individual holdings, or held by some one as a trustee, for all. There are, no doubt, many such syndicates, as well as more individuals, who would buy acres and subdivide and sell in lots, if they were situated to attend to the reselling and had the intelligence or experience to do it rightly.

If the land is rightly bought and rightly handled, it will show a large percentage of profit, which profit often has to be divided with whoever furnishes the time, experience, advertising, etc. If the owner of acres cannot make a wise selection of a man to retail the lots, he should keep them in acres and hope to resell the entire tract in one sale. The best and most desirable subdivision managers will not work for a commission, but feel entitled to a good share of the profits and of the advanced values.

Such a plan is the true theory for the owner if he gets the right connection with the right man.



THE EMERSON PUBLIC SCHOOL
now under roof, one of the largest and best in the United States. Cost about \$250,000.

One good way for the reader to judge as to whether such prices as given above are reasonable, is to compare them with the prices in some city he knows about or can learn about more readily than about Gary. In making up comparisons, he can, in fairness to himself, and should, consider Gary's immediate future, and the great causes of real estate values that now exist there, rather than purely its present population, because if he bases it on population alone, he would be through before he started. By this is meant that Gary, in the first half of the year 1909 has probably not more than 15,000 permanent resident population, and there is probably no town of 15,000 people in the United States where real estate is worth as much as the reader himself regards it worth at Gary. The truer test by comparison is on the basis of what the reader is already convinced will be the least immediate population of Gary (which he could not sensibly put down as less than from 30,000 to 50,000) and make his comparison with other cities of from 30,000 to 50,000 people, some one or more of which he may know values in, such as:

Mobile, Ala.....	50,000
Montgomery, Ala.....	40,000
Little Rock, Ark.....	50,000
Bloomington, Ill.....	30,000
Joliet, Ill.....	35,000
Quincy, Ill.....	42,000
Rock Island, Ill.....	38,000
Fort Wayne, Ind.....	50,000
South Bend, Ind.....	45,000
Terre Haute, Ind.....	42,000
Davenport, Iowa.....	41,000
Saginaw, Mich.....	50,000
Lincoln, Neb.....	50,000
Elmira, N. Y.....	45,000
Schenectady, N. Y.....	50,000
Springfield, Ohio.....	50,000
Altoona, Pa.....	45,000
Lancaster, Pa.....	50,000
York, Pa.....	40,000
Dallas, Tex.....	50,000
Spokane, Wash.....	50,000
Wheeling, W. Va.....	48,000
Green Bay, Wis.....	30,000
Racine, Wis.....	35,000

These population figures are stated on a basis of the federal census of nine years ago, allowing for probable increase since.

Then, if the reader's knowledge and faith lead him to regard Gary as a much greater city soon, he can make his comparison of values so far as

known to him in such cities of larger population as follows:

Birmingham, Ala.	60,000	Grand Rapids, Mich.	100,000
Los Angeles, Cal.	150,000	Duluth, Minn.	60,000
Denver, Colo.	150,000	Manchester, N. H.	65,000
Bridgeport, Conn.	90,000	Camden, N. J.	81,000
Hartford, Conn.	90,000	Albany, N. Y.	100,000
New Haven, Conn.	120,000	Utica, N. Y.	70,000
Waterbury, Conn.	62,000	Yonkers, N. Y.	60,000
Wilmington, Del.	90,000	Akron, Ohio.	55,000
Atlanta, Ga.	100,000	Dayton, Ohio.	100,000
Savannah, Ga.	72,000	Youngstown, Ohio.	55,000
Evansville, Ind.	70,000	Erie, Pa.	60,000
Des Moines, Iowa	70,000	Harrisburg, Pa.	55,000
Covington, Ky.	55,000	Wilkesbarre, Pa.	60,000
Cambridge, Mass.	100,000	Pawtucket, R. I.	45,000
Fall River, Mass.	120,000	Charlestown, S. C.	65,000
Lawrence, Mass.	72,000	Nashville, Tenn.	95,000
New Bedford, Mass.	74,000	Houston, Tex.	60,000
Worcester, Mass.	140,000	San Antonio, Tex.	75,000
Portland, Me.	60,000	Salt Lake City, Utah.	60,000
		Norfolk, Va.	62,000
		Seattle, Wash.	110,000
		Tacoma, Wash.	55,000



EUGENE J. BUFFINGTON.

"The man who does things."

President of the Indiana Steel Company that is expending a Hundred Million Dollars at Gary on an industrial plant "that bears its lesson of economy to every man who makes or sells for profit."

OTHER PEOPLES' SAYINGS AND WRITINGS.

At a banquet in December, 1907, "the United States Steel Corporation" was the topic assigned to E. J. Buffington, president of the Indiana Steel Company. Mr. Buffington was introduced as "a man who did things." It had been his brain which had conceived the great plant now going up on the water front and the City of Gary as it now appears in the first subdivision. Mr. Buffington said:

"I have been asked to respond to a toast that calls for something to be said in regard to the United States Steel Corporation. In a technical sense I am responding to that without my credentials, because it is only in a subsidiary capacity that I represent the United States Steel Corporation. But, perhaps, in so far as the corporation's purposes and undertakings at Gary are concerned, I can give some facts.

Is a Public Corporation.

"The United States Steel Corporation is what I term a public corporation, in the sense of its widely distributed ownership of stock. The United States Steel Corporation, perhaps, has a larger number of stockholders than any other corporation in the world. It employs over 200,000 men in its industrial activities. Multiplying that by five would give us over a million people associated through the employment of labor of various kinds with the United States Steel Corporation. It feels itself a part of the public; it recognizes a duty to the public; it recognizes its responsibility to the public for a strict observance of law and an unswerving adherence to the principles of common honesty. The policy of the United States Steel Corporation is along that line, and it will

always see to it that those who have to do with the administration of its affairs stick closely to the principles of right and justice. Those who have to do with the mapping out of the policy to be pursued by the several subsidiary companies of the corporation believe in the strict observance of the law. They recognize that the only protection that property has is the observance of the law and the maintenance of the law, and the only way laws can be maintained is through their observance.

Why Gary Was Selected.

"The undertaking at Gary by the United States Steel Corporation was the result of its recognition of the necessity to do something on a large scale in the West to take care of the rapidly growing demand for steel and iron products. To give you an idea as to the rapidity with which the demand for those products has grown, I will state that in the year 1890 the total production of steel in the United States was 4,000,000 tons; in the year 1895 that production had grown to 6,000,000 tons; in the year 1900 it had grown to 10,000,000 tons; in the year 1906 the United States produced 23,000,000 tons of steel products.

"Our plans for enlargement were first had with respect to the existing plants of the Illinois Steel Company, the principal plant being at South Chicago. Chicago possesses many of the essentials of manufacture on a large scale; but we soon saw that there was not sufficient elbow room at South Chicago for bringing forth or perfecting our large plans for the building of an additional steel plant. Hence we began to cast our eyes around for a suitable place for the location of a large steel plant. Our observations were confined to the shore of Lake Michigan; we could not afford to break ourselves

away from the transportation afforded by the lake for our ore supplies. Our attention was called to the sand dunes in the northern part of Lake county, and the site attracted us. Our investigation of the depth of the water immediately in front of this land convinced us that there was possible a most magnificent harbor for our shipping; a sufficient depth of water could be had to float the ships of largest draught. We also found good railroad facilities in this vicinity; better, in some respects, than at Chicago, especially with reference to terminal and transfer facilities. Therefore, we cast our lot in the northern part of Indiana.

"The first land was bought in the fall of 1905—a few hundred acres—and the building of the steel plant was begun in the spring of 1906 with the development of larger plans, more land was bought from time to time, until now our holdings amount to approximately 9,000 acres in one continuous body. The plan for the first unit, it may be termed, for steel manufacture, involves the building of eight blast furnaces, fifty-six open-hearth furnaces, accessory finishing mills, rail mill, plate mill, structural mill and mills for making bar steel. The capacity of this first unit will be approximately 2,500,000 tons annually. That will be a larger output of steel than is made to-day by all of the plants of the Illinois Steel Company. That will give you some idea of the scope of this undertaking.

Homes for Employees.

"After deciding to build this steel plant at this site, amid this waste and these sand dunes we recognized at once the necessity of the steel corporation undertaking to build a place for the homes of its employees. Therefore we

were forced to undertake the commencement, at least, of a town. Our connection with the Town of Gary was a necessity; no one else would undertake the expenditure of the capital necessary to make the homes for our employees. Amid this waste and these sand dunes it was not to be supposed that any one would have sufficient confidence in the mere announcement of the plan of the corporation to build a big steel plant that would employ eventually 15,000 men; capital cannot be persuaded to invest in homes on a mere statement of that kind. Therefore the corporation had to acquire sufficient land not only for its steel plants but for the starting of a town.

"The first subdivision of Gary comprises about 800 acres of land, which has been laid off into something over 4,000 lots. The purpose of the corporation with respect to this comparatively small area is merely to give a sample, or endeavor to give a sample, of the lines along which Gary should be built. We were anxious to avoid the conditions which are usually incident to a new community. We purpose in this first subdivision to complete it with well-paved streets and with a sewage system that has been designed by the best of engineers so as to secure the best possible sanitation for the community. It will be equipped with a water works that will give Gary a supply of water inferior to none on the lakes. The capacity of the water plant being constructed can be extended almost to an unlimited degree. It involves the construction of a tunnel over 15,000 feet in length, 7,000 feet of the tunnel being beneath the waters of Lake Michigan, and going out to a depth that will insure as pure water as can be obtained from that source.

Great Public Utilities.

"The gas works will have a capacity from the start to serve a population of over 25,000 people. All these public utilities are being provided by a subsidiary company of the United States Steel Corporation under franchises obtained in the regular way from the Town Trustees. In seeking these franchises we represented that they could be safely entrusted to us and that the Corporation did not seek them merely for the profits which may be made out of them. They will be administered in the best interests of the community, because by so doing the Corporation will be best administering its own interests. We are to depend for our profits upon the steel business. We know more about the steel business than we do about running a town. We expect the people in this community to show us how to run a town. We shall gladly welcome the day when all the affairs of Gary can be taken over by an organization, in due course of law, with no attempted direction by the corporation. There is nothing paternalistic in the undertaking of the corporation at Gary. The corporation has built in Gary at the present time over 500 dwelling houses. Those houses are intended for its employees.

"The plan adopted by the corporation for offering its residence property for sale in the first subdivision of Gary prevents absolutely the property from passing into the hands of speculators. We sell no piece of property within the first subdivision of Gary excepting to those who are prepared and willing to at once put up suitable buildings of an agreed character; so that there is no opportunity in the first subdivision of Gary for the speculators to get hold of property and hold it for their personal advantage and disadvantage of the community."

CONTRACTS FOR STEEL CARS.

In an article about the opening of the first furnace at Gary, the Chicago Record-Herald early in the year 1909 says:

At present a large amount of steel rail and steel car business is under negotiation. Recent orders for cars are 500 box cars and 300 steel hoppers placed by the Lackawana with the American Car and Foundry Company and a contract for 300 steel under frame cars placed by a southern road with the Standard Steel Car Company.

In structural steel the most important recent contract was that for 11,000 tons for the new City Hall building in Chicago, the American Bridge Company being the successful bidder. Several other contracts for small amounts were reported during the week. During the year the American Bridge Company, the Steel Corporation's structural steel subsidiary, has delivered about 350,000 tons of material and will carry orders for about 200,000 tons over into next year. The various independent interests have turned out about 800,000 tons of structural material during the year. During a large part of the year they were hunting for business actively and took it at lower prices than the corporation would consider.

In the January, 1909, issue of "Iron Age" of New York, probably the leading journal in iron and steel in America, is a review of the Gary mills, showing how they are regarded in the steel industry. A part of the article is as follows:

"The Greatest Steel Plant in the World."

Since the organization of the Indiana Steel Company as a constituent inter-

est of the United States Steel Corporation in January, 1906, and the subsequent announcement of its plans for the building of a steel plant of unprecedented size at Gary, Ind., this undertaking has commanded the interest and attention of the entire industrial world. Nor is this due alone to the magnificence of the scale upon which the work was planned; for it was easily recognized that an unprecedented opportunity would be here afforded for a concentration of the most modern methods and appliances for making steel from the ore to the finished product.

The Acme of Achievement.

Projected under conditions unhindered by the limitations of capital and favored by the acquisition of an adequate site, it was expected—and with good reason—that the Gary plant when completed would represent in all of its units, individually and collectively, the acme of achievement in this branch of the world's industries. And as the plans have developed and taken form in construction, no doubt remains that these expectations are in the end to be realized in the fullest degree. The opportunity of designing a complete steel making plant of such size has never before presented itself to engineers; nor indeed can conditions better suited to successful accomplishment be easily conceived. The history of steel plant construction, in this and other countries, has been, generally speaking, one of evolution from more or less modest beginning.

For Future Development.

First plans for such enterprises usually make only imperfect or inadequate provision for future growth and extension, with the result that there are lacking the perfect symmetry and com-

plete co-ordination of parts which are only possible when ultimate ends are in the view from the beginning. Here, however, is a great, well balanced plant, which will finally comprise a system of component units fitted together in a related plan calculated to facilitate, at every stage, the production of steel, and to secure the maximum of economy in the cost of producing it.

AS VIEWED BY THE ENGINEERS.

Magnitude One of Striking Features of the Plant—Thoroughly Modern.

Cassier's Magazine, one of the leading engineering magazines of the world, contains an authoritative account of the new steel plant in Gary. The article was written by a member of the editorial staff of the publication and besides presenting his impressions on the great plant the writer gives an expert description of its construction.

For more than two years past the attention of the civilized world has been directed towards Gary, Ind., where an achievement unique in the annals of industrial history is at present in process of realization. Upon the shifting sand dunes of Northern Indiana, at a point where the Grand Calumet flows into Lake Michigan, twenty-three miles east of Chicago, there are being built, in record time, a city, a harbor and enormous steel works, the largest of their kind in the world. This is all in behalf of one corporation, the Indiana Steel Company, which has secured here a site of 9,000 acres, with a lake frontage of one and three-quarter miles, on which to erect both the mills and a residence city for its employees.

Impressed with Magnitude.

Upon a visitor entering the plant, the first and overwhelming impression is that of magnitude; the second, resulting from close inspection, is of completeness coupled with simplicity; the third and most interesting concerns the practical elimination of waste. From these factors, as a natural resultant, comes "economy," the much-sought necessity of the present industrial world. Here it has been worked out with mathematical certainty.

During a decade or two past the relative cost of producing iron and steel, as compared with the constantly increasing scales of wages paid to workmen, has been reduced largely through the substitution, first, of mechanical appliances for manual labor and then of improved machinery and methods. This change has been and is still taking place all along the line, from the stripping and removal of ore beds by steam shovels to the loading of the finished rails, plates or structural parts on cars ready for shipment. At every stage of the process where new apparatus is used, if the machinery has been wisely designed, properly installed and efficiently operated, costs have been proportionately reduced and a final cheaper—usually better—product made possible.

Methods for Utilizing Waste.

Of late, however, there have come about still more important requirements in steel mill practice, due both to improved metallurgical processes and the necessity of supplementing these by methods for utilizing the inevitable waste, which, consequently, is fast disappearing as "waste" and reappearing as "by-products."

For the benefit of those who have no intimate knowledge of the manufacture of steel it may be well to state, in ex-

planation of what follows, something of the first steps of the process. When pig-iron is to be made, coke, ore and limestone are put in layers in the blast furnaces and then the fires are lighted. A powerful blast of heated air is sent through the burning mass, in order to generate the intense heat necessary to melt the ore and the limestone, or "flux," into a molten mass. In the burning of the coke under a terrific forced draught it is impossible to have consumed all of the heat energy in the coke.

STILL ANOTHER PEN PICTURE OF GARY

In Harper's Weekly of July 4, 1908, "Gary, the City That Rose From the Sand Waste," is made the subject of an appreciative article by John Kimberly Mumford. Space will not permit of the publication of the article entire, notwithstanding it is well worth reading. Excerpts follow:

* * *

Three years ago the wild duck used to flock in the lazy reaches of backwater all about the sluggish bends of the Grand Calumet, and foxes ran in the scrub that thinly clothed the sand hills. Twenty-six miles southeast of Chicago the Calumet Hunting Club had its rude but comfortable huts topping the barren rise above the lake shore. Overworked lawyers and doctors used to go down from Chicago on Saturday night to fish and hunt and swap lies through the Sabbath day, and get braced up for Monday. It was out of the world. Except for the surf and the roaring wind and the periodical bang of the double-barrel it was a silent realm down there. Nature was all alone.

To-day—well, the palace of Aladdin was a hasheesh-dreamer's fantasy.

The tower of Babel was a piece of "jerry" work, because it hadn't like the Steel Corporation, a bunch of polyglot foremen and a billion and a half of money back of it. To-day the Grand Calumet has been moved into a new channel back from the storm-thrashed coast, and titanic steam shovels have sliced away the sand dunes and tossed them into the hollows that were left, to make foundation for mills and shops and offices, and all the manifold buildings that belong by rights to one of the most extraordinary industrial plants on earth.

Long piers grow out into the lake by magic and between them big dredges began gnawing their way inshore. To-day a ship canal 250 feet wide and 25 feet deep extends a mile inland and is still lengthening, to end in a turning-basin where the lake ore-vessels can swing around and put their bull noses out to sea again. All along the west side of it runs a concrete wall big enough to bastion a world, and on it tower the black giants they call "unloaders," with lean arms that reach down and snatch the cargo out of the bowels of a ship in jig-time. Back of these, an endless ore-yard, also of concrete, where mountains can be heaped to await the day when the hot, hungry mouths of the furnaces shall claim them. Ore-bridges, raising their gaunt skeletons into the sky, bins, dumps, cars, obeying the click of an electrical button. Huge, upright cylindrical stoves, gas-consumers, conical blast furnaces, rows of stacks like mammoth sticks of licorice poked up into the face of heaven; acres upon acres of open-hearth buildings, rail-mills, machine-shops, foundries, pumping-stations, bloom-mills, billet-mills, ladles, blowers, conduits, pipes, storage-houses, blacksmith-shops, and what not, all of steel and brick, brick and steel, with their feet set solid in concrete that

goes down to the wet sand below the level of Lake Michigan. And everywhere are strewn the rubble and ruin left from prodigious construction.

* * *

The vice-president of the Indiana Steel Company said there were three reasons for building Gary, none of them sentimental. First, it is a lake port, or will be; second, its railroad facilities for shipment will be perfect; third, it will in a short time be the center of steel consumption, for that center, though now a little farther east, is moving west more rapidly than the center of population, which is now just south of Chicago. The curving south shore of Lake Michigan within the next generation will be a black, reverberant arc of steel-mills, the greatest producing center in the world, and as we go now to look in wonder at the grass-grown sites of vanished cities in the oil regions, so our grandchildren may go some day to pick wild flowers from what in this year of grace are the noisy and smoke-laden streets of Pittsburg. Who can tell?

* * *

The Land of Opportunity.

A month later the writer of the above has, in Harper's Weekly, an important interview with Judge E. H. Gary.

In the course of an interview, Judge Gary tells of the policy of the Steel Corporation in so straightforward a way that the interview is well worth the reading by every employe of the Steel Corporation and by all others who have been brought into contact with it. The most pertinent extracts are given below:

* * *

"There is a great awakening in this country with relation to better conduct, more decency, more honesty, more responsibility—by everybody, to everybody.

"It doesn't make an atom of difference who brought it about. It's here. Mark my words, that is the keynote of the American situation to-day.

"There has been deceit, there has been over-reaching, there have been errors of kinds innumerable, but from this time forward there is going to be more fairness and a lot more candor and rectitude in the transaction of business.

"Any man who says he is not influenced by selfish motives in his dealings is, of course, a hypocrite. We all know better; but there is a host of men who can appreciate a policy of honesty, and every sane man sees that such a policy must be scrupulously followed. And this idea should extend until it prevails in all dealings and in the management of all corporations. It is in the air. The tendency of business henceforth will be to respect the public, and the man who antagonizes that policy will be ground out sooner or later."

This declaration was made to me the other day by Judge Elbert H. Gary, chairman of the United States Steel Corporation.

* * *

When the Steel Trust talks out from the diaphragm there is no man in America, whether he is his own boss or whether he works on a salary, but can afford to sit up and pay attention, because it means something to every individual.

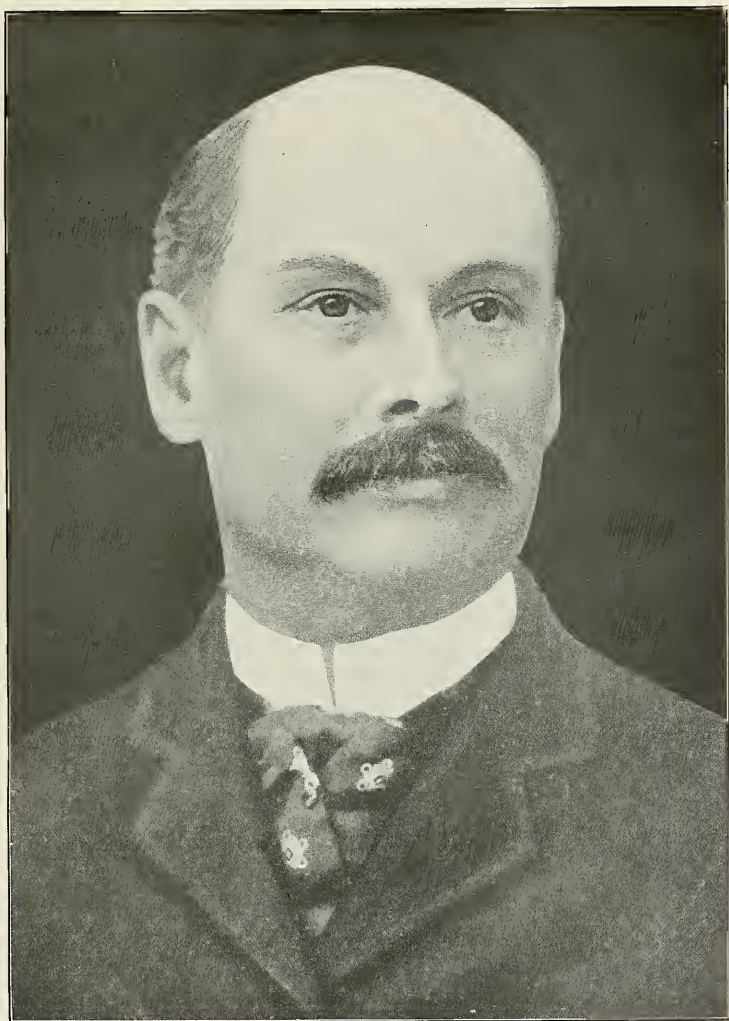
Steel with its billion of money; Steel with its myriad glowing furnaces, its

thundering mills, and its smokestacks thick as stalks in a cornfield; Steel, with its thousands upon thousands of miles of ore land and coal land and gas land; Steel, with its endless railways and its fleet of vessels; Steel, with its swarming populations of workmen and its trade lines penetrating every business and every corner of the world, has become the touchstone of our fortunes and the barometer of our condition.

They used to say "As New York goes so goes the Union." Now they say that as Steel goes so goes the whole mighty current of American business. We live and work in steel buildings, we ride in steel cars and steel ships, our intercourse is over steel wires—we are encompassed and entwined and connected, transported, and finally entombed by steel. We are Steel and Steel is us.

The very form and embodiment of the trust idea—the Simon-pure essence of corporation in its highest potency—is the Steel Trust. Hailed at its birth by the conservative as a monstrosity, and decried as an impertinence greater than Lneifer's, the Steel Trust has been a huge disappointment to many. It was a machine too cumbersome to work, they said; a ship too heavy to float, an annihilator of personal rights and a foe to Honest Labor. But it is still here and growing. It has raised wages and reduced prices. It has averted one panic and steadied the country through another, and it possesses a long arm and a sturdy voice.

It stands to reason, therefore, that what the Steel Corporation, through its authorized spokesman, has to say in this most important stage of business recovery is to be taken, in a way, as the watchword of the times.



JUDGE ALBERT H. GARY

the wonderful organizer and constructive genius. President of the Executive Board of the
United States Steel Company.

**FROM THE CHICAGO ECONOMIST
FINANCIAL EDITORIAL, DECEMBER 5, 1908.**

The drift and the opinion of the Captains of Industry as to the future may be inferred from the developments at Gary and the plans that have been adopted to be worked out later on. Enough has been said in regard to this new field of the United States Steel Corporation to indicate in a way the magnitude of the undertaking, but Chicago does not yet appreciate what is happening close to its doors, and still less does the rest of the world grasp the magnitude of the project. It sounds like exaggeration to say that engagements already entered into contemplate the employment of 75,000 men, and that a population there of 250,000 in the near future is a conservative estimate, but when such information comes from cautious men, familiar with what is going on, one must accept the statements with tolerance at least.

A MODERN INDUSTRIAL CITY.

"American Industries," a publication of high standing in its particular field, devotes several pages of its December, 1908, issue to Gary. It was written by G. Wilfred Pearce, civil engineer. Cogent extracts from Mr. Pearce's article, which is entitled "Gary: A Modern Industrial City," are given below.

* * *

The works are to be operated by the Indiana Steel Company. As planned, the ultimate annual output of pig iron from Gary will be 3,000,000 tons. This vast amount is exactly one-half of the world's output fifty years ago. In 1857 the United States made 1,000,000 tons of pig iron. This year's output will be about 25,000,000 tons. Fifty

years ago the largest cargo of iron ore taken down the Great Lakes was 340 tons, and pig iron, Foundry No. 2, sold at \$31. Better iron is sold to-day at \$16.

* * *

Fifty years ago the learned Sir Lowthian Bell, one of the great ironmasters of Great Britain, gave it for his opinion that the Lake Superior iron ore deposits would not be a factor of importance in less than a century. This season's duntake of iron ores from Great Lake ports will aggregate 40,000,000 tons, which is within 8,000,000 tons of the total export and import tonnage of the ports of London and Liverpool. Gary is planned in a logical way to provide due expansion for the Steel Corporation's requirements. The nation's steel wants double once in seven years. Since the United States Steel Corporation was organized, in 1901, it has appropriated the stupendous amount of almost \$100,000,000 for ordinary maintenance and repairs, and for new construction, extraordinary replacement and real estate.

* * *

The Steel Corporation designs to expend \$75,000,000 in all ways at Gary. But this sum is being put out in what might be termed fixed units of construction both at the works and in the residential locality. About 110,000 tons of structural steel have thus far been used in structures, of which 14,000 tons are in the open-hearth building. The fire brick, in nine-inch equivalents, so far, number 100,000,000. In the frames of shops completed 18,000,000 building brick have been set.

When Gary makes 3,000,000 tons of pig iron a year, something more than 6,000,000 tons of ore will be required, and to that end, suction dredges are making a long and deep channel from the lake to a dock one and one-half

miles long and 250 feet wide, which will be ready for ships in April. There is a logical arrangement of the works by which the products move from docks and flux and fuel receptacles to the blast furnaces and thence to the open-hearth steel works, and so on by the shortest line to the mills for semi-finished and finished products.

All buildings are lofty and have ample open space on all sides. The heating and ventilation systems are as good as in the most costly hotels in the great cities. In the foundry and machine shops the window space is the double of the sizes used until recently in mill construction. The sanitary plumbing is of the best, and the potable water is supplied from a long intake from the lake which goes out so far that the water is as pure as any on earth. The ore unloaders can discharge 97 per cent. of a ship's cargo in a few hours and convey the ore to the mixing bins with the speed of a railroad train.

* * *

As compared with methods of working pig iron and steel plants thirty years ago, the 20,000 hands that will be employed at Gary, when plans shall have been completed, will do more work than 100,000 hands working under the antiquated methods, still largely employed in a number of Eastern plants.

Ore, iron and steel finished products in those trades originate immense tonnages. Within five years the annual tonnage at Gary will attain the colossal amount of 14,000,000 tons a year. The years are not far away when by the dredging of the Grand Calumet River that courses near the mills at Gary, vessels drawing up to fourteen feet will be able to ply between Gary and Mississippi River points, via the Chicago Main Drainage Canal.

The Georgian Bay Canal undertaking by Canada, soon to be begun, will give Gary the opportunity for sending ships without breaking bulk direct from her docks to any port in Europe or Asia. All existing grade crossings in Gary are to be abolished and a fine Union Railroad Station is to be built.



THE FIRST STEP IN THE PRODUCTION OF GARY'S POWER.

From the tops of the blast furnaces the waste gases are blown down into the dust catchers shown here, which remove the heavier impurities. Of these the ore dust is saved and re-smelted. The gas is treated to three further processes.

The Chicago Tribune Gives Details of Road Coming from Milwaukee.

Plans of the greatest commercial importance to Chicago and to the manufacturing district of which this city is the center became public yesterday through an announcement from St. Louis that control of the Chicago, Milwaukee and Gary Railway had been practically secured by the St. Louis Union Trust Company. Arrangements also have been made, it is said, whereby \$10,000,000 is to be expended on the property to complete the outer belt line around Chicago. When completed the road will extend from Milwaukee to Gary, a distance of 251 miles, encircling Chicago at a radius of about fifty miles.

The present line from Rockford, Ill., to Mokence, Ill., 125 miles long, is to be extended at once from Mokence to Gary, twenty-six miles, at a cost of \$2,225,000. The extension from Rockford north to Milwaukee 100 miles will cost \$6,595,000, and a new line is to be built from Aurora to Joliet twenty-two miles at a cost of \$1,180,000. The road now uses the tracks of the Elgin, Joliet & Eastern Railway between these points.

Avoid Chicago Congestion.

Besides affording facilities for the handling of freight between its terminals, including the new steel town, the road possesses great possibilities for the handling of through freight from the western to the eastern roads along the line of least resistance, avoiding the rapidly increasing congestion incident to the Chicago terminals.

Milwaukee last year handled 96,000,000 tons of freight in and out by means of only two railroads. Besides the Wisconsin city and Gary, the road passes through several important manufacturing cities, including Aurora, Joliet, Dekalb, Janesville and Beloit.

THE CONSUMPTION OF STEEL.

Over a year ago a writer, among those most informed as to Gary, wrote:

The consumption of steel doubles once in seven years; the larger degree of growth in the development of the country is in sections tributary to Chicago and St. Louis. Gary is only 123 miles from the center of the country's population, and the trend of that center is toward that town. The site has an exceptionally good location right on Lake Michigan, and the water front of six and one-half miles is ample for dock requirements for many years ahead.

Three-fourths of the estimated quantity of iron ore at the Upper Lakes is controlled by the Steel Corporation, and the estimated amount is sufficient to endure through a century. The distance saved between upper lake ports and Gary as compared with Lake Erie ports and the transfer to rail for the long haul to the Pittsburg district gives the Steel Corporation's boats, some of which carry 12,000 to 13,000 tons of iron ore, many more trips in a season.

* * *

Gary should be regarded as an important unit in the Steel Corporation's sagacious plans for increasing production in a degree commensurate with the growths of the markets and the trend of the development of the Central West. More than one-half the nation's production of steel is taken by the railroad interests, and Gary is almost in the heart of the section which will exhibit the largest degree of increase in trackage within a decade. Hence there is what might be termed enough local business to support all the plants now planned for Gary.

Iron ore and fuel will be massed at Gary during the early summer of the coming year, and by August or September the blast furnaces will be at work.

and immediately thereafter the open-hearth furnaces will be charged. By January, 1909, Gary will be an important factor in the steel trades, and from then onward other metal working industries will be attracted thereto.

* * *

ITEMS.

The principal residential streets are named for the original thirteen states and for presidents of the United States. In the heart of that district is the site for a park which is to be beautified as soon as possible. In the matter of churches, the Steel Corporation tells the clergy and trustees to pick their lot, and when that is done the corporation donates the land and makes a contribution to the building fund. The same is the case with relation to a proposed structure for the Young Men's Christian Association.

There is to be a fine park at the lake front with a bandstand and an amusement hall, and there is a rumor that a fine library is to be built by a gentleman of prominence in the Steel Corporation. There is plenty of good building ground owned by the corporation and designed for sale to employes at a very small return upon cost.

* * *

A lot of land was sold to a Chicago brewer just outside the corporation's residential tract the other day for \$14,000, which a year ago was sold for \$800.

* * *

It is understood by the iron and steel trade workers that Gary is to be what they term "an all star town," that is, the working men are to be picked, sober, energetic and reliable men who know how to get on, and who appreciate the fact that north, south, east and west, the United States Steel Corporation has always stood for "a

square deal" for every man, and that promotion goes for merit. These facts are not widely known outside the steel trades, yet it is the explanation of why thousands of the corporation's employes are inspired by ambition to get upward in the service, as they see every day fellow workers earning very large incomes who a few years ago were day laborers or clerks in minor capacities. It is this attitude toward employes that is such a great factor in the earnings of the Steel Corporation.

* * *

RAYMOND TELLS STORY OF GARY

(Written in Oct., 1908.)

Celebrated Correspondent of the Chicago Tribune Writes of Magic City of Steel.

NO SIGN OF MUSHROOM GROWTH

Astounded Over Vast Expenditures at Mills Before Any Returns Can Be Made.

Just think what it means in a commercial way to spend \$100,000,000 within a radius of ten miles and within a period of less than ten years. That is what the United States Steel Corporation has begun to do in this vicinity, and no man can estimate the effect on business and politics in northern Indiana, and even over the line between Illinois and Michigan.

First of all, as to the commercial transformation which has been effected in this land of sand mountains, teal duck, and pine barrens. There could not be a more unpromising field than this old bed of Lake Michigan for a demonstration of the unlimited power of great capital to make a wilderness blossom like an American beauty, and by giving employment to many thou-

sands of men to add to the comfort of the community.

How many people of Chicago knew what was meant when the great Steel Corporation announced that it proposed to secure possession of nine miles of water frontage on the southern shore of Lake Michigan, and dump out on the sand dune country \$40,000,000 before it should receive a cent in return or a single ounce of manufactured steel?

City Grows Up in a Night.

Do many people understand that today, but a little over two years after the ground was broken in one of the most forbidding wildernesses of the country, where the lake shore sand stings the face and the Calumet swamps entrap the feet, there are now 5,000 men at work and \$250,000 in cash at the least estimate is distributed every month? Words like "astonishing," "marvelous," "astounding," and "miraculous" seem entirely trite in describing the results reached by the preliminary millions already spent.

A city has grown up in the night. It is not a mushroom village with miles of temporary shacks and drink parlors, such as we were accustomed to see in the far west during the boom times, but a real city, with miles of well paved streets, water supply, sewerage, a bustling daily paper, banks, hotels, street cars, and substantial buildings of brick and stone constructed with heavy foundations to permit an extension upward in the near days to come.

Here is a city where there are not homes enough to shelter the thousands of prosperous workmen, and every night and morning long trains pull them to and from their work, many of their homes being in South Chicago, Englewood, and intermediate towns. There are other industrial centers in northwestern Indiana, like Whiting, Indiana Harbor and Hammond, but

Gary is the newest and most astounding of them all.

Gary's Population 12,000.

I went there to look up certain new political conditions, but the commercial and industrial surprises are so great they must be told about before the political revolution of the county and state can be appreciated.

Gary wasn't even on the map four years ago, and yet the residents of the place now put its population at 12,000. That seems an overestimate of the people actually living there, for one cannot forget the throngs of workmen on the long trains of the Lake Shore, Wabash, Baltimore and Ohio and Pennsylvania lines.

That there are 5,000 men actually at labor in the construction work of the great steel works is undeniable, with others employed in building up the town. Allowing for a small proportion of women and children—this is a man's town as yet—a population figure of 12,000 is not excessive if applied to all those who work or sleep in the new city.

These two years have been devoted to building the plant of the steel company, to erection of business blocks, and to the creation of a section of artistic suburban residences which are even now occupied by the superintendents and heads of departments, who must be on the ground early and late, while the workmen within half an hour can reach the Chicago limits.

Shows Stupendous Undertaking.

Even a few hours devoted to a rapid scurry through the new plant will show the stupendous character of the undertaking. It would be easy to pile up figures of hundred tons cranes, of a mountain of 400,000 tons of iron ore now on the ground, of giant stacks and

imposing dress parades of gas engines and electric motors, but the main facts are quite enough.

In the first place, the United States Steel Company found by the reports of its mathematicians that there was a point where the transportation cost of fuel and machinery met that of raw material, and where this common point was adjusted to freight rates on the finished product. This place seemed to be somewhere on the southern coast of Lake Michigan, where there was water carriage for the bulky ore, easy access to coal and coke, and a natural distribution for the product.

Chicago was barred because of the prohibitive cost of the land for the plant. On the southern shore of Lake Michigan, where the northwest wind for centuries had piled up the sand back to the swamps and out into the lake, and where the old great river which used to empty Lake Michigan into the Mississippi has almost been forgotten, a place was found where land was cheap, where every great trunk line could be tapped, and where water transportation from the Lake Superior iron mines was at hand.

Plant Will Lead World.

Gary, named after the master mind of the steel trust, was therefore conceived and the vast plant formulated. It involved, as I have said, an expenditure of \$100,000,000 in lands, buildings and machinery. The result will be a steel plant with the greatest producing power in the world.

It is literally true that the United States Steel Corporation is planning to spend the vast sum of \$100,000,000 on its plant alone and that it will pay out \$40,000,000 before it makes a pound of steel.

Through the courtesy of W. P. Gleason, the superintendent of the con-

cern, I was enabled to take a running jump through the plant. A carriage will take one into the center of a great network of railroad tracks and strangely shaped buildings, with their fantastic domes and stacks, but from that point one must be prepared for a leg racking trip over miles of cinder plazas, acres of lake sand, and vast areas of monster buildings, some of them now ready for the steel making.

Ore Slip of Big Capacity.

There is a steamship slip where the ore boats from Lake Superior dump 10,000 tons at a time of the red product of the ranges. We cross the abandoned main line of the Baltimore & Ohio and learn that this trunk road with the Lake Shore was obliged to divert its main right of way to make room for the steel monster.

And this town of Gary is the most wonderful thing of all. The steel trust has wisely avoided all appearances of paternalism. The Pullman experiment has not been repeated. Gary is an independent municipality in every sense of the term. Land was acquired from the trust, but except as to certain limitations regarding immediate building, it is free to any man who has the price of purchase.

Spirit of Commercialism.

In my short stop in the town I was accosted by one man who wanted to sell me a lot and another who insisted I should take a whole block. What appearance of prosperity there was about me, I cannot conceive, but my second friend, who was redheaded and a hustler, insisted there was no stroller on the streets of Gary who did not want to buy a lot or a dozen of them, and he kept at my heels like a South

Clark street old clo' man long after I had disdainfully denied even the suspicion of capitalism.

Gary has a main street many miles long, on which there is a trolley line running between vitrified brick pavements from the Pennsylvania station, which is well out of town, up to the "works" themselves. As one gets up-town there is a real city.

There are substantial banks and hotels, a rich variety of merchandise shops, and full preparation for a city of 50,000 people, which the inhabitants think certain in the next year or two.

There are department stores, restaurants, pharmacies, gin mills, book stores, offices of physicians and lawyers, undertaking shops, and all the outward evidences of civic prosperity.

Working Force of 15,000.

When the plans of the steel trust are finally accomplished there will be a permanent working force of 15,000, the men to be put at work in subsidiary concerns like the American Bridge Company, which are already preparing to locate here.

At the present time not a furnace is in operation. The foundry will open in a few days, not for commercial work but merely to make castings for the plant itself. There are now, as I have explained, 5,000 men engaged in the construction work exclusively.

About 1,000 of these are employed on the interior railroad system in delivering material and machinery. Of the other 4,000 over half are picked employes of the company engaged in installing the machinery. They will be permanent residents.

A construction force equally as large as that at present will be required for

the next two to five years. Meanwhile one unit after another of the mills will be put in operation, some of them beginning this winter, so that Gary will have a working force of 10,000 men long before it can provide them with cheap homes enough for their daily habitation.

MAGNITUDE MOST STRIKING.

**C. A. Tupper, Writing of Gary Mills in
"Industrial Progress" Makes
This Comment on Them.**

Still another view of the Gary mills from the technical side is given in a current number of "Industrial Progress," by an article written by C. A. Tupper, representing the Allis-Chalmers company. In the introduction to his article, which covers several pages of the magazine, Mr. Tupper says:

"For more than two years past the attention of the civilized world has been directed towards Gary, Ind., where an achievement unique in the annals of industrial history is at present in process of realization. Upon the shifting sand dunes of northern Indiana, at a point where the Grand Calumet flows into Lake Michigan, 23 miles east of Chicago, there are being built in record time, a city, a harbor and enormous steel works, of which the last named are the largest of their kind in the world. This is all in behalf of one corporation, the Indiana Steel Company, which has secured here a site of 9,000 acres, on which to erect both the mills and a residence city for its employes.

Overwhelming Magnitude.

"Upon a visitor entering the plant, the first and overwhelming impression is that of magnitude; the second, resulting from close inspection, is of completeness coupled with simplicity; the third and most interesting concerns the practical elimination of waste. From these factors, as a natural resultant, comes 'economy,' the much-sought necessity of the present industrial world. Here it has been worked out with mathematical certainty.

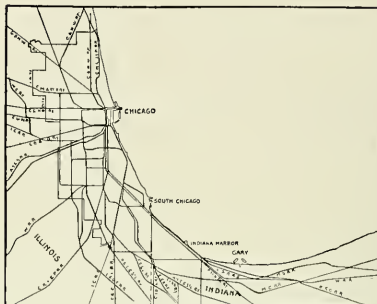
"During a decade or two past the relative cost of producing iron and steel as compared with the constantly increasing scales of wages paid to workmen, has been reduced largely through the substitution, first, of mechanical appliances for manual labor and then of improved machinery and methods.

Designed to Lower Cost.

"This change has been and is still taking place all along the line, from the stripping and removal of ore beds by steam shovels to the loading of the finished rails, plates or structural parts on cars ready for shipment. At every stage of the process, where new apparatus is used, if the machinery has been wisely designed, properly installed and efficiently operated, costs have been proportionately reduced and a final cheaper—usually better—product made possible.

"Of late, however, there have come about still more important refinements in steel mill practice, due both to improved metallurgical processes and to the necessity of supplementing these by methods for utilizing the inevitable

waste—which, consequently, is fast disappearing as 'waste' and reappearing as "by-products." "



MAP SHOWING RELATION OF CHICAGO, SOUTH CHICAGO, INDIANA HARBOR AND GARY AND THE NETWORK OF RAILROADS IN THIS DISTRICT.

A recent editorial in the Chicago Daily News says:

Chicago as an Iron and Steel Center.

Pittsburg is today the great iron and steel center of the country, but there are signs that Pittsburg's supremacy in this respect must pass to the industrial area of which Chicago is the center. The Pennsylvania city is situated amid great coal fields. In former years iron ore was mined in its vicinity in large quantities, but now the ore used by its mills in the manufacture of iron and steel is drawn largely from the region at the head of the great lakes. It is this fact that gives Chicago the chance to acquire the supremacy as an iron and steel producing center. Iron ore can be brought to the foot of Lake Michigan cheaper than it can be taken to Pittsburg, since the latter trip requires a rail haul for part of the distance.

The three principal ingredients which go to the making of iron and steel are the natural ore, the fuel and

limestone. Limestone abounds near Chicago. The iron ore can be brought here at relatively small cost. Chicago is near great coal fields. In so far as the coal of Pennsylvania, with its better coking qualities, is required in some of the steel-making processes, there is more economy in bringing it or the coke made from it to this point than in taking the ore to Pittsburg. If the coal is coked near Chicago the gas formed as a by-product can be readily marketed. Because of these considerations the greatest iron and steel making plant of the United States Steel corporation is being established at Gary, which is a suburb of Chicago.

The presence of cheap iron and steel is an invitation to manufacturing plants which need them as raw material to come to this neighborhood. It is not surprising, therefore, that great manufacturers are seeking sites in the environs of Chicago. These elements of growth in population and business must exercise an immense influence upon this great community in the coming years.

GARY MILLS SEEN BY ENGINEERS

Exhaustive Article on the Engineering Features of the Great Plant.

4,000 TONS OF RAILS DAILY

Capacity Will be 4,000,000 Tons Per Year—All Operated by Electricity.

The Engineering Record, one of the great engineering periodicals in the country, devoted several pages of its issue last week to the steel mills at Gary. The article is exceedingly important, as showing the view point of

leading engineers. Extracts are given below:

Practically the whole plant will be operated by power furnished by internal-combustion engines, using blast furnace gas. The plans call for sixteen 500-ton blast furnaces of standard design, eight of which are now either completed or under construction.

Cleansing the Gas.

The gas passes from the top of each furnace through four outlets into two downcomer pipes, which lead into a dry dust catcher, thirty feet in diameter by forty feet high. In the latter a considerable part of the impurities settles to the bottom and the gas passes into another large pipe which leads upward some distance to increase the quantity of dust dropped and then turns down again emptying into a supplementary tank, fourteen feet in diameter by twenty-five feet high, one of which serves each pair of furnaces. This structure not only provides an additional dust catcher, but also acts as a valve, being divided into two compartments partially filled with water. The two chambers of this tank discharge into a pipe ten feet in diameter, which carries the gas into the primary wet washers.

The primary washers are cylindrical, with a cone-shaped bottom and top, and are kept about one-third full of water. Water cascades down through each drum, and the stream of gas is directed up against it from near the bottom of the drums. A stream of water is spread into a film on the surface of the cylinder, and the whirling drum throws such impurities as the gas still holds out against the water film, where they are caught. From these final washers the gas is conveyed under slight pressure to the holders, each of which has 200,000 cubic feet capacity, from which it goes, as re-

quired, to the electric power station and blowing engine houses.

44,900,000 Cubic Feet Per Day.

Sixteen blast furnaces produce about 44,900,000 cubic feet of gas per twenty-four hours, equivalent when used in gas engines, to 500,000. horse power. Of this quantity approximately 30 per cent. is taken for heating the stoves, 7.6 per cent. is diverted to steam boiler furnaces, 5 per cent. is consumed by various auxiliaries or lost in the process of cleansing, 12.5 per cent. operates the gas engine-driven blowers, and 45 per cent. supplies the electrical power station.

For the eight furnaces thus far erected there are two blowing engine houses, one of which is 600 feet long and 104 feet wide, and the other of the same width, but 530 feet long. The former building includes a central pumping and hydraulic power plant. Each house contains two steam-driven blowers, in addition to the gas engines, but when the plant is in full operation these blowers will not be used.

Each of the sixteen blowing engines consists of a horizontal, twin-tandem 2,500 horse-power gas engine, having 42x54 inch cylinders, and two direct-driven Slick blowing tubes rated at 30,000 cubic feet of free air per minute against a pressure of eighteen pounds per square inch, but proportioned for operation at any pressure up to thirty pounds.

Electric Power Station.

The central power station, which is 105x966 feet in plan, with forty-two transverse twenty-three feet bays, adjoins the blowing engine houses and is between the blast and open-hearth furnaces.

This places it advantageously for fuel supply and insures minimum lengths

of transmission lines to the various departments furnished with current. The foundations of this building and also of both blower houses consist in each case of a slab of concrete five feet thick, underlying the entire structure at about the level of Lake Michigan. On this heavy slab are separate foundations for each of the generating and blowing units.

In order to pass from the blast to the open hearth furnaces a subway has been built under the floor of the building at the transverse center line of the latter, thus enabling workmen to avoid a long detour that would otherwise be required to keep them out of the power house.

In this central station are installed seventeen 4,000 horse-power horizontal, twin-tandem, double-acting gas engines, fifteen of which are designed for coupling to alternating-current generators and two to be connected to direct-current generators.

Exhaust From Gas Engine.

The exhaust from the gas engines is conveyed to a 9x12 feet under-ground tunnel, immediately outside the building. This tunnel runs the length of the building and is provided at each end with a stack, nine feet in diameter by ninety-two feet high. The same method of muffling the exhaust is provided for the blowing engine houses.

The power generated will be distributed throughout the works and used to operate heavy induction-motor-driven rolls, the tilting and feed tables for the various passes, the hot saws, hot and cold pull-ups, hot rolls, transfer tables, straightening and drilling machines, cold saws, elevators, conveyors, pumps and a multitude of machines and mechanical devices auxiliary to the operation of such an enormous plant. Several of the motors for driving rolls in these works are of 6,000

horsepower capacity each. From these large motors the size ranges down to machines of the smallest capacity used to operate switches in the power house. The problems of control presented by the multitude of motors installed in the plant involve many unusual features. The electrical system as a whole is subject to central control at a switchboard operated from a gallery, sixteen feet high, in the station.

Open Hearth Furnaces.

In the construction of the open hearth furnaces provision has been made for retaining the heat of the molten iron. At the same time a more uniform quality of the ingots is insured by conveying the molten iron directly from the blast furnaces to enormous mixer in 40-ton ladles on special trucks. These mixers, of which there are two, with a capacity of 300 tons each, are shaped like converters and are in the north end of each of the open-hearth furnace buildings. From these the molten metal is again poured into 40-ton ladles, carried by cranes to the furnaces and there emptied in by means of charging machines.

The plans of the plant provide for six batteries of basic open-hearth furnaces, fourteen to the building, of which two batteries, or twenty-eight furnaces, are at present constructed. The six open-hearth furnace buildings contemplated in the plans will be identical with the others in construction, being 1,200 feet long and built in three spans, giving a total width of 193 feet, with a height of 104 feet above the floor line, thus allowing for excellent ventilation.

At the north end of each open-hearth building is a structure eighty-six feet wide by 120 feet long, for the mixers, and for a pit for relining the 40-ton hot-metal ladles. The balance is occupied by the furnaces, each sixteen feet

wide and forty feet long, with a rated capacity of seventy tons. In the construction of each furnace 800,000 bricks were required, making a total for one building of over 11,000,000, or about 67,000,000 bricks in the six buildings to be built. The open-hearth buildings are equipped with electrically-operated cranes, both traveling and fixed, one with a capacity of 125 tons being provided in the casting department, and another of the same capacity on the charging side of the furnaces. The ladles employed in pouring off are each of eighty tons capacity.

12,000 Tons Daily Capacity.

As it takes about eight hours for a heat in one of the open-hearth furnaces, and the latter are never allowed to cool except for repairs, the daily capacity of each of them will be approximately 210 tons, giving, with one furnace down for repairs, a daily total of 3,360 tons for each building. When the four open-hearth buildings now completed or under construction are in operation, the Gary plant will, therefore, have a capacity of 12,000 tons of steel per day or 2,500,000 tons per year. With all six buildings in service the total capacity of the plant, as planned by the United States Steel Corporation, will be upwards of 4,000,000 tons per year.

With everything running at full capacity, 4,000 tons of steel rails can be produced daily, and in a normal operation the mill is expected to turn out 100,000 tons per month.

The group of rail mill buildings is about 300 yards from the lines of the open-hearth furnaces. The main structure is 1,800 feet long, and at right angles to it is another building of one-third the length, with a width of eighty-five feet in a single span. This latter building contains twelve soaking pits,

each supplied with gas from an independent mechanical gas producer. The arrangement here is such that ingots enter from the open-hearth furnace buildings along the entire length of one side of the pit building, the other side being reserved for the electrically operated ingot buggies which transfer the heated ingots through the first stand rolls. The ingots used are 20x24 inches by six feet, weighing 8,500 pounds each.

Progress of the Rail.

After the finishing pass the rail travels through to the saws, of which five are provided, thus cutting four rails to length. These four rail lengths consist of half the ingot. As the capacity of this mill is 4,000 gross tons per twenty-four hours, it will be seen that there must be a four-rail length sawed about every half minute. The saws are forty-two-inch blades, arranged to be raised and lowered in unison by one controller from the hot-saw operator. Following the hot-saw run the rails pass over the usual cambering machine and are run on to hot beds, 100 feet long, of which four are at present installed, with provision made for two more if necessary. These hot beds extend to the south of the mill proper. In the finishing mill section they are of unusual design, being made of structural material and placed eight feet above the floor to allow for an extraordinary large air space to facilitate the rapid cooling of the rails.

The finishing building is 1,383 feet long, central with the hot beds, and is provided with live rolls extending its entire length. Presses complete the rails, and from them the rails are transferred to a roller table, which extends the full length of the building, and from which the rolls may be skidded to the loading beds just outside the building.

Operated by Electricity.

For the operation of cranes, tables and other apparatus, in and about the rail mill, requiring direct current, two 500 kilowatt synchronous motors driving direct-current generators have been furnished. This equipment, with the necessary switchboards, is located in one of the motor houses at the rail mill and is designated Sub-station No. 1. Other sub-stations suitably equipped are being located in other sections of the plant.

The loading yard is provided with the usual inspection beds and two tracks, each about 1,400 feet long, connected with the track system of the plant at both ends, thus avoiding any unnecessary shifting. The yard is also served by an eighty-foot traveling crane for the entire length of the finishing department, and by means of this the rails are placed directly on flat cars. In loading steel rails the ordinary way has been to switch in on stub tracks, which requires the cars to go out the same way. In the Gary plant the railroad tracks along the finishing department of the rail mills will be at a slight grade, so that the cars can be moved by gravity to the point where they are needed. The empty cars come in on one of the nine tracks forming the trunk line. They are then switched to tracks making a broad curve to the finishing department.

Billet Mill.

The billet mill consists of four continuous stands of forty-inch blooming mills, each two of which are driven by a 2,000 horse-power motor. After leaving these the ingot is turned end for end on a turntable and passes through a five-stand, thirty-two-inch continuous mill, the entire mechanism of which is driven by one 6,000 horse-power motor. At the end of the twenty-four inch mill is placed a roller table. The billets may be transferred to an eighteen-inch

continuous mill to be further reduced, or, if for sale, to a shear and from thence to overhead billet pockets, from which they may be loaded directly into ears.

The ingots for the billet mill are heated in twelve soaking pit furnaces, arranged similarly to those adjoining the rail mill. Each of the pits in both buildings is supplied with gas from one independent mechanical gas producer.

The additional mills to be built are a 60-inch universal plate mill, which will be the largest of its kind in the world, and a 44x160-inch sheared plate mill. These two mills will each be served by a 32-inch slabbing metal. Further extensions to the Gary works include an axle mill, a structural mill, an 8-inch, a 10-inch, a 14-inch and an 18-inch merchant bill. The mill buildings have steel frames with brick sides and corrugated iron roofs. The open hearth stripper and soaking pit buildings have steel frames and corrugated iron sides and roofs. The structural steel in these buildings and elsewhere in the plant was furnished by the American Bridge Company, supplemented by the Illinois Steel Company.

The blast furnace plant is also provided with five pig casting machines. These machines make pig iron and load it directly on ears, if for any reason the open-hearth plants are unable to take care of the product of the blast furnaces, as on Sunday, when the mills are not in operation, or when it is desired to send the pig to any other plant of the United States Steel Corporation.

In connection with the furnaces and mills of the steel plant proper, there has been erected a group of buildings of general utility, consisting of a machine shop, foundry, boiler shop, blacksmith shop, pattern and carpenter shop, pattern storage building, roll shop, electrical repair shop, brick storage

house and a well equipped general storehouse. These shops have steel frames, brick walls and concrete tile roofs. There has also been provided a yard locomotive house, which is rectangular in plan, with tracks running through on an angle from one side to the other, thus avoiding the necessity of a turn-table.

Of these utility buildings the most interesting is probably the foundry, a structure 136x400 feet in plan, in three spans of 36, 40 and 60 feet respectively. This building contains two eupolas for making iron castings, and two 25-ton open-hearth furnaces for making steel castings. It is served by eight cranes of capacities ranging from 5 to 50 tons. The blacksmith shop is also noteworthy for the improved appliances which it contains, and it likewise houses boilers to generate steam for operating trip hammers and for heating the shops of this group.

**ENGINEER OFFICE, U. S. ARMY,
508 Federal Building.**

Chicago, July 27, 1908.

Mr. H. S. Norton,
President Gary Commercial Club,
Gary, Ind.

Dear Sir:

I desire to thank you specially for your invitation of last week to the "Opening of Gary Harbor," and for the pleasure which it gave me to accept and be present.

The possibilities of Gary are enormous; it starts to-day with the advantages which Chicago acquired only after many years of hard struggles. If properly handled, Gary and its adjoining towns may in fifteen to twenty years rival, if not surpass, Chicago as a commercial and manufacturing community. May it successfully arrive at that position.

Very truly,

W. H. BIXBY,
Colonel Engineers, U. S. Army.

THE MAP HEREWITH

had, during last year, months of careful preparation by the writer, and, since then, has been changed to date. Steel Company officials and railway officials have strongly commended it. The lines of railroad shown are from surveys furnished by the Engineering Department of the Vanderbilt System. The following points can be better understood by reference to the map:

Each mile square is what is called a "section" and the number of the section is in the middle of it.

The Steel Company's subdivision, shown in white, contains the lots that they are selling with building restrictions, etc., and is all the property they have on the market. This subdivision is the "core" of the city and contains some fifty miles of streets that are paved or being paved.

The east and west street car line in this subdivision is on Fifth avenue, and the north and south one on Broadway. These are the business streets of the town on which buyers of lots must build brick and stone store buildings. On other streets, residence improvements are required.

The town is spreading out far and wide beyond this subdivision into territory where no building restrictions are imposed, but there are strong assurances of the city's realizing on the Steel Company's theory that a new city with a heart or core, one mile by two miles in area, of fine streets and good buildings, will stimulate the same things in all additions thereto.

All east and west streets are "avenues" and numbered from First avenue, crossing the north end of Broadway at the entrance to the works, to Ninth avenue at the south end of their subdivision, and about Twentieth avenue at the Fort Wayne crossing and depot on Broadway.

The thoroughfares running north

and south are called "streets"; those lying east of Broadway being named after the states of the Union, and those lying west of Broadway named after the presidents in the order of their election.

At the north end of Broadway is about to be built the large Union Depot of the Lake Shore and the Baltimore & Ohio Railroads; at about Ninth avenue and Broadway will be the Union Depot of the Michigan Central and Gary and Western; and about Twentieth avenue and Broadway the depot of the Fort Wayne Railroad.

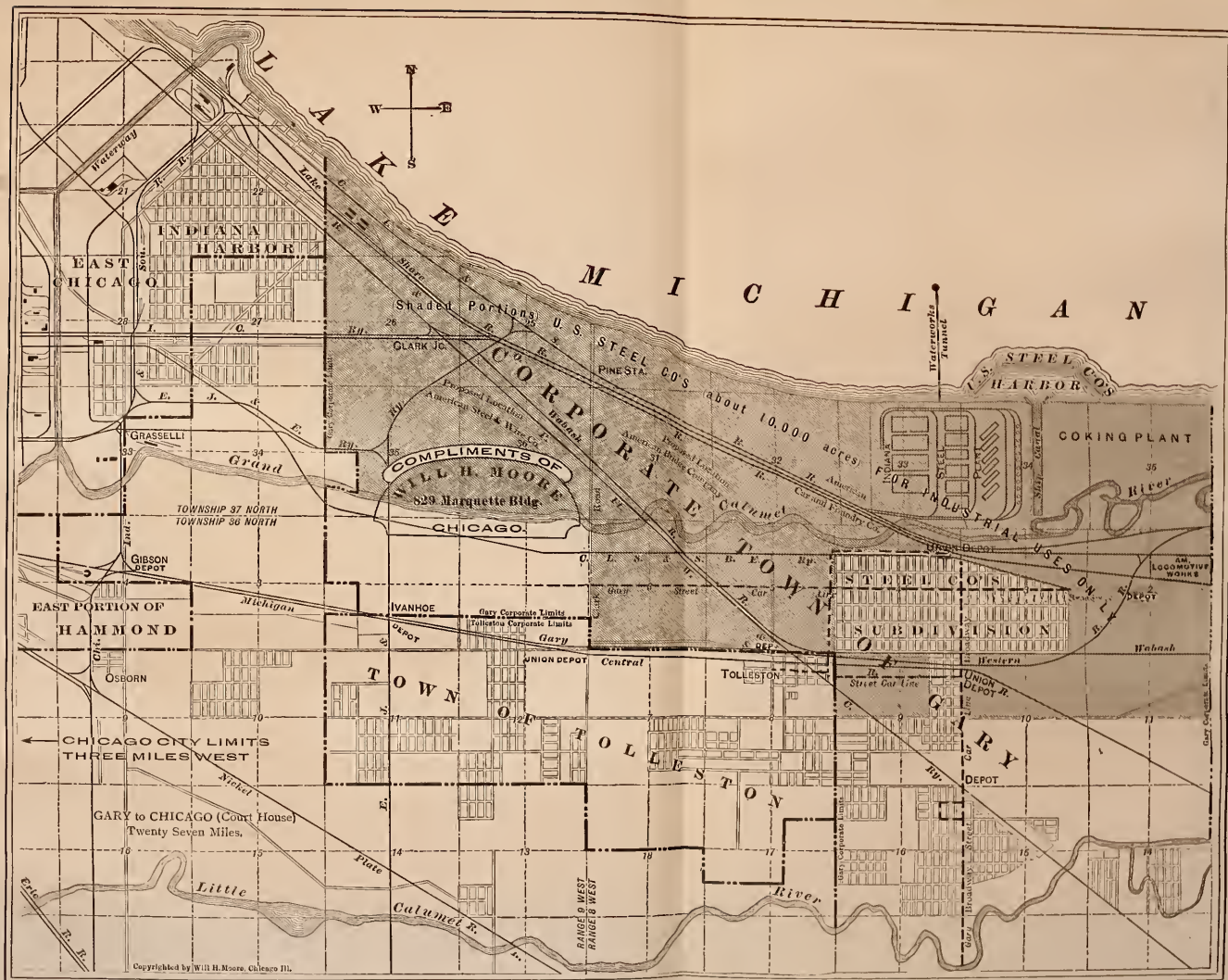
At the upper end of Broadway is the entrance to the mills and the depot of the Chicago, Lake Shore & South Bend Electric, a through fast line running hourly trains between Gary and Chicago and from which, just west of the Steel Company's subdivision, a branch is in operation into the Tolleston region. The Broadway line also has a branch westward on Eleventh avenue to Tolleston.

Where the stations on the new Gary & Western R. R. would be, has been a matter of much curiosity and some significance. Their location has just been announced. Near the American Locomotive Works there will be a new station called Alco. The other stations are at Broadway; 1st St. in Tolleston; one at Clark Road; one at Ivanhoe, and one at Gibson. The one at Clark Road is a Union Depot for the Gary & Western and the Michigan Central.

The shaded portion of the map represents the about 10,000 acres of the Steel Company's industrial lands. None of this is for sale unless it be to manufacturing institutions desired by the Steel Company.

Through these lands extends east and west, the Grand Calumet River, which is to be straightened, widened and deepened to form the Lake Michigan end of the Ship Canal to the Gulf.





Along the south edge of the map is shown the Little Calumet, along each side of which is considerable low land, between which and the Steel Company's holdings are about all of the Gary acres that are "ripe" for subdivision. Much of this is already in lots and the reader will see that the best, close in, acreage that is for sale, is limited in quantity. Even some of this acreage is low in spots, which is one of the things a man well posted in real estate there must know about. It is generally made of ridges several hundred feet wide, extending east and west with depressions of about the same width between the ridges. It is usually covered with small trees from ten to thirty feet high, and nearly all of sand surface to such an extent that it is bare of grass. If the trees were cut away it would look like an immense stone wash board.

There are as yet in this outlying district, not many wagon roads and very few of them even graveled. The only way to know this land thoroughly is to "tramp" around and over it, which

the writer did in the summer of 1907 to the extent of hundreds of miles and as much more since.

WHAT DOES "TOLLESTON" MEAN?

It means an attractive residence area cornering into the corporate town of Gary and now, in every way but legally, a part of Gary. All students of the situation consider it certain that within a year or two, the corporate town of Tolleston will be merged into Gary. In the northeast corner of the town of Tolleston is a small village at the crossing of the Michigan Central and Fort Wayne Railroads, called Tolleston. It is peopled by good German citizens who have lived there for a generation and has very good residence conditions, including schools, drainage, transportation, high ground, much fine tree growth and has now two electric lines to the entrance to the Steel Works, only six or eight minutes away.

For those who are Wondering how it would be to Live in Gary ?

To such readers, certainly no more accurate idea could be conveyed in print than the following few pages of clippings, mostly from the Gary Tribune, covering a period of the last year and a half. While one of such clippings of itself might not signify much, the aggregate, novel as the method is, will throw much light on the civic, social and educational affairs of the town, which interest every reading member of a family that is thinking of moving to Gary. Many of the clippings are condensed and many residents' names omitted.

LID NAILED DOWN ON

GARY SALOONS

Magic City of Steel Takes Its Place on Water Wagon for a Year.

The City of Gary was turned out of the sanitarium where it has been under treatment for the past year, and those who had the city in their care say that it is effectually cured of the liquor habit.

But those who knew Gary in the palmy days when the "lid was off," are standing around the corner, and patiently waiting to see a headlong tumble from the water wagon. Today the city sits proudly on the seat beside the driver of that time honored vehicle which is filled with many sister cities of Indiana.

Lid Reverently Nailed Down.

There were only fourteen saloons left to pass away, and it was midnight before the doors were closed. Patrons of the various saloons gathered around the bars, and bought the small stock that remained in the shelves.

Then at 12 o'clock, one hour later than the usual closing time, the proprietors shook hands with the patrons and the "lid" was closed, reverently nailed own and securely sealed.

OMAHA COUNCILMEN IN GARY.

Members of Junketing Party Look Over Local Pavements.

Gary is fast gaining an enviable reputation among the city councils and county commissioners of the country for her pavements and civic improvements. Last Saturday the county commissioners of Omaha, Neb., made a trip to this city to inspect the streets and pavements.

FOR FIRST PRESBYTERIAN.

Ground Broken by Church Officials— First Spadeful Turned by Mrs. Walton.

Ground was broken Tuesday afternoon for the building of the first Presbyterian church in Gary. The building committee of the Presbyterian church, the trustees and Rev. and Mrs. F. E. Walton, pastor of the church, gathered at the site at Van Buren street and Sixth avenue Tuesday afternoon at 2:30 to turn the first earth for the new building, which will be erected at once.

STILL ANOTHER TROLLEY LINE.

Applications for a franchise for a new interurban railroad connecting the cities of Hammond, East Chicago, Indiana Harbor, Gary and Crown Point will be made to the councils of Hammond and East Chicago, Monday night by a company known as the Calumet Traction Company.

BIG FLAT BUILDING ON 6TH AVE.**Twelve-Apartment Structure Corner of Van Buren Street to Cost \$40,000.**

Another big flat building will go up at Sixth avenue and Van Buren street. It will be three stories high and have accommodations for twelve families.

The new building is on the southeast corner diagonally across from the Brant building, which is now being erected on the northwest corner, and which will also be three stories high and will contain twelve flats.

Will Cost \$40,000.

The plans for the new building call for pressed brick front with Bedford stone trimmings, and are for one of the best structures of its kind in Gary. The estimate cost is \$40,000.

SOCIETY IN GARY.

One of the pleasant receptions of the week occurred Wednesday afternoon at the home of Mr. and Mrs. Harry Alschuler. Mrs. Alschuler was the hostess to a party of eighty ladies of Gary and Chicago, who took this opportunity to visit the newly completed home of the Alschulers at 600 Van Buren street.

The reception was held from 3 to 6 o'clock and during its progress a three-course luncheon was served in the beautiful dining room of the residence.

The decorations were in red and green and tastily arranged. Holly and poinsettii were among the decorations and carried out admirably the Christmas effect desired.

Mr. and Mrs. Alschuler have been in their new home only a few weeks and the reception was the first of a number of social functions they will

give during the season. The house is beautifully decorated and arranged.

In receiving Mrs. Alschuler was assisted by Miss Stearn of Chicago and Mrs. E. G. Cogshell of this city.

Mrs. W. P. Gleason entertained yesterday from 12 to 2 p. m., at a nine-course luncheon, in honor of Mrs. Raymond Lennon of Joliet. The Gleason home at Seventh avenue and Jackson street was beautifully decorated in colors and roses and palms. The dining table was decorated with pink roses. The reception room was adorned with American beauty roses and the living room was decorated in red and green, with palms.

Besides Mrs. Raymond Lennon, in whose honor the luncheon was given, were Mrs. Daniel Lennon, Mrs. J. Lennon and Miss Nellie Lennon of Joliet.

* * *

The Cotillion Club of Gary, the newest organization of dancers, held its first annual dance last night at Binzenhof Hall. More than seventy-five couples were present. The hall was artistically decorated with crepe paper in gold and purple, the colors of the club.

Music was furnished by Bigelow's Orchestra, and the dancing began at 9 and continued until 12, there being about twenty numbers on the program. During the evening D. H. Pitzele, formerly of Pittsburg, introduced a number of fancy dances from the east, which will be included in the programs of future functions given by the club.

MASONIC TEMPLE IS NOW PLANNED**Social Club of the Order Decides to Build.**

Arrangements for the purchase of property upon which to build a Masonic Temple were completed Wednesday night at a meeting of the members

of the Gary Masonic Social Club at the Delaware Hotel. It is the intention of the Masonic order in Gary to proceed as speedily as possible with the plans already mapped out and it is believed that within a few months ground will be broken upon which the temple will be erected.

BIG BUSINESS OF GARY'S P. O.

Over \$250,000 Handled in 1908, According to Postmaster Call's Official Figures.

SOME STARTLING STATISTICS.

The Gary postoffice did a business of a quarter of a million dollars in 1908. Postmaster Call has just compiled the statistics of his office for last year. The figures are fairly startling as to the volume of business transacted in the office.

The total receipts of the office for the year were \$15,540.

The total number of pieces of mail handled at the Gary office during the year was about 2,500,000.

NIGHT SCHOOLS TO

TEACH ENGLISH

Great Boon of Foreign-Born Residents Soon to Be Installed in Gary.

The school board of Gary has completed all arrangements whereby the night school system will be opened within a few days after New Year's. A large attendance is expected.

More than thirty applications have been made by young men who wish to enter the schools as soon as they are opened. The applicants have been mostly foreigners who wish to become

better acquainted with the English language.

The first courses taken up in the night school will be the learning of English and other studies which bring into use the study and constant use of the English language. The teachers employed will speak the English language alone, this system being now considered the best for teaching languages. After the English language is thoroughly understood by the students other branches of study will be taken up, and taught to the students, who may want a more advanced education in English branches.

Manual training will be given a prominent place in the night schools when the system is thoroughly established. The electrician, clerk, carpenter, or men of any other trade may attend the schools and secure instruction in the advanced courses of his work entirely free of charge.

Modeled After German Night Schools.

The famous system of training schools of Germany, in which young men are trained after leaving the common schools, will be models after which the Gary night school system will be fashioned. The aim of the board is to give aid to every person who wishes to specialize in any one line.

CITY HALL PLANS.

STRUCTURE TO COST \$45,000.

To Be Located at Seventh and Massachusetts.

J. E. Hammons & Son were awarded the contract for the architectural work on the new Gary City Hall by the board of trustees Tuesday afternoon. The decision was reached by the trustees after plans had been submitted by three architects.

Fire Department on First Floor.

The fire department will be located on the first floor, too. Space has been provided in the center of the building for fire buggies and an engine. Four stalls are provided and a fireman's room, giving 400 square feet of space, is furnished. The chief of the fire department will have a private office 10 by 14 feet. The fire buggy and patrol wagon will be taken care of on another side of the building. Three horse stalls are provided there.

CONFIDENCE IN GARY.

How Gary is regarded at Indianapolis was shown Tuesday in the bids for the bonds, which the Town of Gary is selling to build the City Hall.

The two highest bidders were bond houses from the state capital. Indianapolis houses saw the Chicago bond houses and not only went them one better, but went them several better in their offers. In fact, the prices offered by Indianapolis houses show that Gary's credit is as good as the credit of metropolitan cities. Even at 4 per cent. a good premium was offered for the bonds.

FEAST ON ROAST PIG.**University Men Hold Weekly Dinner
—Dr. Hosmer Carves.**

Members of the University Club feasted on roast pig and chicken Friday evening at the Gary Hotel at the weekly dinner. Manager O'Donnell, of the hotel, prepared the north dining room of the hotel for his guests and placed a piano in the room so that all sorts of college songs could be indulged in.

All the men were seated at a single table placed in the center of the room. The honor of carving the pig fell to Dr. H. M. Hosmer.

**CALL IS NOW FOR ACRES TO
DIVIDE.**

Gary real estate is closing the year in a sort of statu quo. The most marked feature of the closing weeks is a sharp demand for acreage which the purchasers desire to hold until next summer before subdividing them. Several important sales have been closed in and around Tolleston of this kind.

STORES CLOSE AT 9 TO-NIGHT.

According to the agreement signed by forty-three of the Gary merchants, practically all of the business houses in Gary Monday night closing at 9 o'clock every evening with the exception of Saturdays and pay days. The stores remain closed all day Sundays.

PERSONAL MENTION.

Will H. Moore, a veteran real estate man of high standing in Chicago, writes a letter to the Gary Tribune, which is well worth the reading by every man dealing in Gary property.

* * *

Mr. and Mrs. J. W. Williams of Marshall, Minn., parents of Mrs. Clarence C. Hall, are the guests of Mr. and Mrs. Hall at the Gary Hotel. They are en route to Hot Springs, Mo., and will continue on their way to the southern resort to-morrow.

* * *

Mrs. William McNeil has returned from a three days' visit to New York City.

* * *

Attorney R. C. Morrison spent Sunday at his former home in Elkhart, Ind.

SECOND CONCERT IN COURSE.

Masonic Social Club Prepares for Scotch Singers Friday Evening— Second Annual Ball.

The Masonic Social Club last night, at its meeting at the Gary Hotel, prepared for the second entertainment in its lecture course next Friday night. It will be a concert by the Scotch singers. It was decided to make no further canvass in the sale of season tickets, but to depend on the sale of course tickets at the banks and drug stores. The price of course tickets for the three remaining entertainments was fixed at \$1.25. Besides the Scotch Singers Friday night, there will be a lecture by Opie Read in February and a concert by the Lyceum Grand Concert company in March.

BEGIN TO BUILD CASINO.

The Gary Casino at Connecticut street and Fifth avenue was begun this week and it is the intention of the owners to get it in operation before September 1. The building will be used as a skating rink and dance hall. It will also be useful for public meetings.

REPAIR SHOPS MAKE A GIANT PLANT

A Side Issue of the Big Mills Which in
Itself Is a Great Industry with
an Army of Workmen.

BROADWAY LINED HALF A MILE.

Aggregate of ground covered by buildings, 5 1-5 acres.

Material used, steel, brick and cement; wood only in doors and windows.

Longest crane track, 660 feet.

Total number of men to be employed when in full operation, 2,000.

Storage capacity of fire brick, 2,000,000.

Product, repair work for the steel mills.

The big buildings which line Broadway for a half-mile between the viaduct and the rail mill, marking the northern terminus of Broadway, will themselves turn out no finished product to the world and yet they are most important in the operation of the plant. They are what is known as the "shops." They are simply to repair what wears out or breaks down in the great structures where the actual production of iron and steel is going forward.

Over Five Acres of Buildings.

The "shops" in themselves make a large manufacturing establishment. In all, they cover a space of five and a fifth acres. In construction they are absolutely fireproof. Steel, brick and cement are used. The only wood in any of the structures are window and door frames and doors. Unless there should be an earthquake or some similar upheaval the shops are practically

indestructable. They will last as long as man continues to inhabit these parts.

The "shops" can easily make new machinery and later on may be used in that way for constructive purposes. At present, however, all of the machinery used in the erection of the mills is coming from the factories, although the shops are so nearly completed that they could begin new construction within a fortnight.

Can Be Doubled in Size.

It is said that when the mills are in operation to the limit of the plans originally planned by the steel corporation, nearly 2,000 men will be employed in the "shops" alone.

With the same foresight for the future which has dominated the great Gary project from its inception, all of the shops are so located that they can be doubled in capacity by simply building on additions.

HOTEL ARRIVALS.

Dec. 4, 1908.

Gary Hotel—C. Z. Martin, Dayton, O.; R. M. Little, South Bend, Ind.; H. M. Love, Milwaukee, Wis.; F. H. Biggett, Jr., Pittsburg, Pa.; Mrs. M. F. Whiting, Miss Florence Whiting, Englewood; C. M. Brownson, Grand Rapids, Mich.; Miss Inez Goddard, Miss Agnes Carnduff, F. P. Hamburg, Henry Teller, George P. Jackson, Chicago; D. C. Maiton, Dayton, O.; F. R. Thompson, Indiana Harbor; L. Henman, New York; F. A. Lawler, Chicago; C. J. Branham, Michigan City; D. Henry Brennan, Carbondale, Pa.; D. L. Guipe, Indianapolis, Ind.; F. B. Castle, Quincy, Ill.; J. D. Shipman, W. Kline, Toledo, O.; J. M. Moody, Philadelphia, Pa.; F. W. Baylor, Chicago;

L. Adelsdorf, A. B. Monitz, E. A. Tift, Chicago; Marvin Wallach, Oshkosh, Wis.; C. F. Riehle, Milwaukee, Wis.; A. H. Coosley, Boston, Mass.; D. W. Sanders, Covington, Ind.; L. D. Blackman, Miss Augusta Wallis, George A. McGinnity, Chicago; F. N. Gavit and family, Whiting, Ind.; William Kulenkamp, Ann Arbor, Mich.

Victoria Hotel—W. L. Thomas, Titusville, Pa.; Mortimer Madden, Charles Kidd, Indiana Harbor, Ind.; George Deller, Cincinnati, O.; F. D. Rospler, Chicago; D. S. Mitchell, William Parry and wife, Chicago; H. L. Ward, Cincinnati, O.; W. H. Heaton, Boston, Mass.; E. L. Coddington, La Porte, Ind.; John Fabiny, Seeleyville, Ill.; W. F. Shrum, Latrobe, Ill.; Peter Klein, South Bend; Albert Uhl, St. Louis; J. Barnes, Chicago; Peter Klein, South Bend, Ind.; Lillian Black, J. P. Brill, W. P. Hord, Thomas Grant and wife, Chicago; C. B. Millar, Boston, Mass.; William Herbold, Peru, Ill.; J. F. Potshard, Marshall, Ill.; W. F. Shrum, Latrobe, Pa.; Miss Eva Ditzler, Markle, Ind.; W. E. Blakely, Indianapolis, Ind.; Peter Kline, South Bend, Ind.; James Mitchell and wife, Chicago.

Hotel Norton—Miss C. M. Wright, La Grange Ill.; Dennis R. McCarthy, Niagara Falls, N. Y.; H. S. Dickson, Toledo, O.; Howard Hildebrand, La Porte, Ind.; George A. and Mrs. Henderson, Miss Brantley, Chicago; Riley Denton, Wyoming, Ill.; Mrs. J. D. Campbell, Miss Selena Campbell, Mrs. Ursula Rose, Philadelphia, Pa.; Glyde Urkon, Plymouth, Mass.; J. Nussbaum, Chicago, Ill.; W. F. Tice, wife and daughter, Crown Point; J. A. Davis, John Moran, Elyria, O.; R. J. Scott, Davenport, Ia.; J. A. Davis, W. S. Roche, Crown Point, Ind.; John Moran, Elyria, O.; R. L. Scott, Davenport, Ia.; Charles Gahagan, George Dillon, Joliet, Ill.

GARY REACHES ERA OF FLATS.

**Apartment Buildings Now Going Up
On Both Sides of the First
Subdivision.**

**New \$35,000 Building to Be Erected
at Sixth Avenue and Van
Buren Street.**

Gary has now reached the flat building era of her existence. On every hand flats and apartment houses are going up. On both the east and west sides of the First Subdivision excavations are being dug and frame superstructures are being erected for flat buildings.

Building to Cost \$35,000.

A twelve-flat three-story apartment building of latest design and construction has been planned for the heart of the West Side residence district. The building will cost \$35,000. It will be located at the northwest corner of Van Buren street and Sixth avenue and will be erected by J. R. Brant of Indiana Harbor.

The new flat building will face on Van Buren street with a large grass plot in front. Six flats will front on Van Buren street and the other six will front on Sixth avenue. The building will measure 50 by 125, the lot being 150 feet in length and 90 feet in width.

All Apartments Steam Heated.

The apartments will be steam heated, with stationary wash tubs and clothes driers in the basement. There will be a light court between the two sets of apartments and a freight elevator capable of giving service to all the flats.

The building will be of brick with store trimmings, and have an ornamental front. Mr. Brant has already erected a business building in Gary in the Minnesota block. He is confident that a high-class flat building will pay returns on the investment.

MAJESTIC TO OPEN MARCH 1.

**Gary's First Vaudeville Playhouse
Nearing Completion—Town Be-
ing Billed for First Show.**

Joseph S. Kuechlei, the local manager of the new Majestic Theater, which is nearing completion, came to Gary to-day, and will remain here while the theater is being finished. Mr. Kuechlei will inspect the interior arrangements of the theater, place the advertising for the opening week, and make all arrangements to start the new vaudeville house successfully.

**LOOKING OVER GARY FOR Y. M.
C. A.**

**International Secretary McDill Here in
Interest of Local Branch.**

George D. McDill, international secretary of the Young Men's Christian Association, with headquarters in Chicago, arrived in Gary yesterday afternoon for a visit of several days. Mr. McDill's purpose in coming to Gary is to acquaint himself thoroughly with the conditions in this city in order to make a report to the executive board of the organization, which, it is understood, is planning the establishment of Y. M. C. A. quarters in Gary.

E. E. Stacey, Indiana state secretary, is also expected to be in Gary before the week is over. He will confer with Mr. McDill on the plans to be pursued in establishing headquarters and organizing a local branch.

The advisability of establishing Y. M. C. A. headquarters in Gary has been prominent in the minds of a number of residents for more than a year. It is believed that if the organization is given a good start here that it will soon grow to large proportions. In case a move is made in that direction it

is likely that funds will be subscribed for the erection of a building suitable to the purposes of the organization. It is understood that a large number of young men in Gary are interested in the project and they are ready to be enlisted in the work just as soon as it is deemed advisable.

GARY MINSTREL CLUB FORMED.

Minstrel Show Will Be Given Two Nights—May 27 and 28.

The Gary Minstrel Club, with a membership of nearly thirty, was organized Tuesday evening at Binzenhof Hall. It is the purpose of the club to give the minstrel show for which it has been preparing on the nights of May 27 and 28 in Binzenhof Hall. A professional trainer from Chicago was present at the meeting and the initial instructions to the chorus and end men were given.

ANNEXATION OF TOLLESTON.

It is reported that a good many people residing in Tolleston are more than anxious for annexation to Gary, but the town board of Tolleston cannot see it in that light. On the other hand, the town board of Gary is ready to take in its western neighbor as soon as the people want to join.

Tolleston is really a part of Gary and there is no logical reason why it should not have the same town government. Until Gary was founded Tolleston was without any significance and its growth within the past two years has been owing wholly to the founding of Gary. Its real estate has advanced simply because of the steel mills. In the end, Tolleston must become a part of Gary, and for the systematic development of the new city annexation cannot come too soon.

BANK DEPOSITS HAVE BIG JUMP.

Gary Institutions Grow from \$200,000 to Half a Million in a Year.

The banks of Gary made a remarkable advance in the period from July 15, the date of their midsummer report, to September 23, when the last call was made. The report of the First State Bank of Tolleston is not in hand to make a complete analysis of the three Gary banks, but the report of the First National and the Gary State Bank exhibits a remarkable advance.

Great Gain in Figures.

The total deposits of the two banks September 23 were: \$411,655.37. This was a gain of \$138,867.76. The loans of the two banks up to September 23 were \$193,346.46, a gain of \$40,624.29.

If the Tolleston Bank, which is really a part of Gary's financial interests, were added, the total deposits would doubtless exceed half a million dollars.

The steady increase in the item of loans and discounts show that the local banks are being able gradually to increase their facilities to local business firms and contractors.

Tremendous Gain in a Year.

September 23, 1907, the deposits in the First National Bank of Gary were \$123,463.18. The Gary State Bank had not yet begun business, but the First Bank of Tolleston had deposits bringing the deposits for Gary to about \$200,000. The increase from \$200,000 to \$500,000 in a year represents the progress of the city as a business and financial center.

From the start one great difficulty of business men and contractors has been to secure needed accommodations in the way of loans. The new town did not have the banking capital required and as yet the depositors were

not sufficiently numerous to add materially to the banking strength.

Loans to Local Firms.

During the past six months this condition has been rapidly changing for the better. Business houses are establishing a credit, and local bankers feel more certain in making loans.

With the new building and loan association in operation, which will gather in local funds and render them available for loaning purposes, another step forward will be taken toward a larger working capital in the new city. The savings deposits in the Gary State Bank show a steady gain, and these, too, are adding to the banking strength.

Merchants Making Money.

The steady gain in bank deposits indicates that the merchants of Gary are making some money even if the lack of houses is seriously retarding the growth of the city by compelling families to live away from here. If homes should be provided in Gary for the families of all the men who are employed at the steel mills and in the construction of buildings, it would not be long before the bank deposits would jump from half a million to a full million dollars.

TO BUILD SWEDISH CHURCH.

Prospects for Place of Worship Are Considered Very Bright.

Members of Swedish Lutheran church congregations in the northwestern part of the state met in Gary for the purpose of ascertaining the prospects of organizing a Swedish Lutheran church in the steel town. The meeting was held in the Episcopal Church and the large attendance was very encouraging to the promoters of the proposed new church.

SOUTH SIDE NOW HAS GAS.

First of Connections Turned On To-day Expected to Increase Rapidly.

The south side now has gas, that much needed fuel and light for which residents of that part of Gary have been crying for months. A large number of people have had connections made with their houses and places of business and the number is expected to increase as the mains are laid farther south.

START WORK ON FORTY HOUSES.

Will Occupy Entire Block South of the Pennsylvania.

The contract for excavating the basements of the forty houses which are to be erected in the Wheeler and Petty Addition south of the Pennsylvania was let Monday. The work was begun Wednesday morning and will be completed within thirty days.

The sand taken from the basements will be used to fill in the low places in the block and the lots on which the houses are to be built will be leveled before the buildings are begun.

The houses, to be built by a retired real estate dealer of Chicago, will occupy the entire block. They will be cottages of various sizes and will be built so that they will be within the reach of the working men who wish to locate in that part of the town. They will be completed during the summer and will be placed on sale early in the fall.

METHODISTS PLAN TO BUILD.**Early Construction of Their Church at Seventh Avenue and Adams Street Is Now Assured.**

The members of the Methodist Episcopal Church of Gary have taken the first steps toward building the new church at Seventh avenue and Adams street and the actual work of building will begin within a few days.

The committee will hold a meeting this week to complete the arrangements for beginning the work. Plans that have been submitted by architects will probably be accepted. The church now has sufficient funds for beginning the work, and an attempt will be made to push the work to completion this spring.

DOCTORS ARE TO AID COURT.**Gary Medical Society to Appoint Delegates This Afternoon—University Club Joins.**

The physicians of Gary will join in the general citizens committee for the establishment of a Superior Court in Gary. The physicians have taken great interest in the movement and as many of them have come to Gary from towns and cities throughout the Hoosier state, their assistance will be most valuable in the legislature.

The Gary Medical Society, in whose ranks are enlisted nearly all the physicians of the new city, will hold a special meeting at the Gary Hotel this afternoon to select three delegates to the general citizens committee.

Bar to Meet Friday Night.

The Gary Bar Association will hold a special meeting at the Gary Hotel Friday evening to take up definite plans in the campaign for a court.

The citizens general committee will meet at the same hotel Saturday evening, when matters of great importance will be considered. The presidents of all the constituent bodies have been invited to attend the meeting of the citizens committee, as their aid is needed on one or two vital issues.

University Club to Join.

The University Club will join in the citizens' general movement by naming three delegates to the committee. There are over seventy members of the University Club, and its addition to the citizens' movement will be decidedly helpful.

TO WORK FOR MAIL CARRIERS.**Commercial Club Names Committee, Which Will Get to Work for Mail Delivery in Gary.**

Prior to taking up the court question the Commercial Club appointed a committee to take charge of the movement for securing a mail delivery system in Gary. This committee will get itself in touch with the postoffice department and take all necessary steps to force the issue of a carrier system in Gary.

PRESBYTERIANS HOLD SOCIAL.**One Hundred Persons Gather at Home of Rev. Walton for Evening.**

The musicale which was held by the members of the Presbyterian Church of this city, at the home of Rev. and Mrs. F. E. Walton, was one of the most pleasant social functions of the season. One hundred persons were present.

Those who took part in the program were: Piano, Master Louis Christian-

son, May McNeil, and Miss Vivian Creutz; violin, William Douglass; vocal, Ruby Gough, Mr. Howard, Eugene K. De Witt; piano, Mr. Boyd; readings, Mrs. F. E. Walton, Dr. E. L. Schiable.

BIG FEAT IN CONSTRUCTION.

Allis-Chalmers Company Has Already Delivered to Steel Mills 3,100 Cars.

In the last annual report of the Allis-Chalmers Company, just made public in New York, some interesting figures regarding its contracts with the United States Steel corporation for material to be furnished and for orders already completed, are given. That part of the report relating to machinery furnished for the Gary plant reads as follows:

"On account of contracts with the United States Steel corporation's plant at Gary, Ind., the Allis-Chalmers Company has already delivered 3,100 cars of machinery at that point. If those shipments had been moved at one time in one train the length would have been twenty-one and one-half miles."

BUILDERS TO HAVE AN EX-CHANGE.

The main topic of the Builders' and Contractors' Association meeting Thursday was the establishment of the Builders' and Traders' Exchange of Gary. The project of the establishment of such an exchange was brought up several weeks ago, but has never been definitely discussed until at the regular meeting which was held in the Gary Hotel in the afternoon.

The members of the association are practically unanimous in the opinion that the exchange would be of the

greatest benefit to both the contractors and the building supply men.

THAT PASSENGER STATION.

This announcement appears in today's Construction News: "The Lake Shore & Michigan Southern Railway Company, 144 Van Buren street, represented by J. W. Crissey, its resident engineer, room 318, 144 Van Buren street, and the Baltimore & Ohio Railway Company, represented by L. G. Curtis, its division engineer, 135 Adams street, will jointly build a passenger station at Gary, Ind. It will be two-story, 70x150 feet, of steel and concrete construction, have pressed brick exterior and is estimated to cost, including the train shed, about \$200,000."

GARY A MIRACLE.

"The greatest industrial miracle of the world is the City of Gary," began Senator Beveridge. "I have traveled 12,000 miles during this campaign; I have seen the new cities of the coast and the cities that have sprung up in Oklahoma, but the fact remains that the most marvelous creation upon which the eyes of man ever looked is Gary, Ind."

REPORT SHOWS 105 PERMITS.

Majority of Those Issued Were for Residences in First Subdivision.

Building Commissioner W. H. Kliwer's report for the month of March shows that permits for 105 dwellings and business buildings were issued during that period. The majority of these were residences for the First subdivision and are now under construction.

WATER SOON TO 17TH AVENUE.

**Mains Will Be Opened to 10th Avenue
To-day—Rapid Work South.**

Water Superintendent Luscombe reports that the water is now running as far south as Eleventh avenue, and before Thanksgiving will be running to Seventeenth avenue.

Leonard Fitzgerald reports the opening of the gas mains Thursday as far south as Tenth avenue.

**SUBURBAN SERVICE ON
THE WABASH**

**More Trains to be Put on the Gary
Run.**

NOW LEADS ALL OTHER LINES.

E. I. Crossley, local passenger and freight agent of the Wabash Railroad, has taken up the question of suburban train service on that road and has received the promise that a complete system of suburban trains will be established here before April 1.

Mr. Crossley came to Gary in November, and found the affairs of the road in a bad condition. He recommended a 35-cent fare between Gary and Chicago, and it was accepted by the officials of the road, who decided that the former rate of 52 cents was more than should be charged to obtain the patronage of Gary people.

More Suburban Trains.

With the suburban fare established, four trains will be put on between Gary and Chicago.

Great Freight Traffic.

The Wabash, during the past three months, has exceeded all other roads in freight traffic at Gary, a greater amount of business being handled than by all other roads combined.

**WORKING ON FIRST
ORDER FOR RAILS**

**Gary Plant Begins on Steel Rails for
the Chicago, Burlington & Quincy.**

Steel rails are now being turned out by the Gary mills on their first order. They will go to the Chicago, Burlington & Quincy Railroad. The next order will be the first consignment on an order of 30,000 tons for the Baltimore & Ohio Railroad.

Work began at 6 o'clock Tuesday, two crews being at work in the rail mill. They will work together this week, and next Monday they will be separated into day and night shifts, the rail mill then being kept in operation without a stop for twenty-four hours of the day.

NO OCCASION FOR SURPRISE.

The announcement that the American Locomotive Company will build the most complete and best equipped locomotive works in the world at Gary, Ind., should not be in the nature of a surprise to people who are familiar with the magnitude of affairs at that wonderful place. The company has purchased 130 acres of land and is having plans drawn for a new plant. The land purchased is twice the extent of that occupied by the largest of the company's plants and when fully occupied the plant will give employment to from 12,000 to 15,000 men. The land adjoins that of the new plant of the United States Steel Corporation. The site at Gary, twenty-four miles from Chicago, was selected in order to provide for the territory where the largest number of railroads converge to a single commercial center. The Chicago district is a great railroad center and the district is favorable as a location for securing material for building

locomotives. The company now operates plants in Schenectady and Dunkirk, N. Y., Pittsburg and Scranton, Pa., Richmond, Va., Paterson, N. J., Manchester, N. H., and Montreal, Canada. At present there is no large locomotive plant west of Pittsburg. The size of the new plant will be sufficient to provide liberally for the growing needs of the railroads for years to come.—Construction News.

GARY DOCTORS TO ENTERTAIN

**Meeting of the Local Medical Society
April 11 to be a Notable One—
Many Will Attend.**

The meeting of the Gary Medical society on April 11 will be given over to the entertainment of representatives of medical societies from all of the cities in the northern part of Indiana and arrangements are being made for some of the best speakers in the medical profession to be present at the meeting.

TO BUILD TOLLESTON HOME

A. Carlson to Construct Brick Residence in Suburb.

A. Carlson, the Gary real estate man will start within a day or two the erection of a residence at the corner of Bormann boulevard and First street. The house will be of brick, two stories in height, containing six rooms and a bath. It will cost in the neighborhood of \$3,000, and will be completed in two months. As soon as the house is ready for occupancy, Mr. Carlson will remove his family from South Chicago.

EPISCOPAL CHURCH IS NOW ASSURED

**New York Donates \$10,000 for the
Building Fund.**

**Five Thousand Dollars More Now Being Raised in the Diocese for the
Gary Edifice.**

SOME \$35,000 TO BE EXPENDED

A telegram which practically assures the erection of a handsome Episcopal church in Gary, was received here Wednesday from New York. It stated that \$10,000 had been awarded by the church authorities in that city for the Gary edifice. The telegram also said that the purchase price of the lots reserved for the church at the corner of Fifth avenue and Adams street, had been cared for by an "unknown friend." It was currently surmised that this "unknown friend" was J. Pierpont Morgan, who is an ardent Episcopalian. Judge E. H. Gary recently made a gift on his own account of a site for the church of the Methodist denomination, of which he has been a lifelong member.

"The liberal gifts from New York," said a member of the church yesterday, "means that we will be able to build an edifice costing from \$30,000 to \$35,000. The corner selected by the church authorities is one of the best and most accessible in the city, and a handsome structure there would be a great ornament. We have been hoping for some time that these donations might be made, but the positive announcement by telegraph is most satisfactory to us."

BIG AUDIENCE HEARS READ.**The Great American Story Teller Roy-
ally Entertains in the Masonic
Social Club Course.**

The Opie Read lecture given at Assembly hall Thursday night under the auspices of the Masonic Social club, was unquestionably the most successful entertainment that has been given here. Mr. Read being widely known as one of the most entertaining speakers, tickets sold early, and at 8 o'clock the hall was filled.

Mr. Read was introduced at 8:15 by H. J. Carr, after which he talked for an hour, his subject being, "First One Thing and Then Another." "I have chosen this name for my talk," said Mr. Read, "so that I will be sure not to get off the subject."

Mr. Read's lecture was of the greatest interest to every person in the audience. Bright humorous sketches as well as stories of pathos were used to illustrate the points that he brought out.

**Report of the Condition of the
FIRST NATIONAL BANK OF GARY
In the State of Indiana.**

At the close of business, Nov. 27, 1908.

RESOURCES.

Loans and discounts	\$144,714.37
Overdrafts, secured and un- secured	296.23
U. S. Bonds to secure circula- tion	30,000.00
Premiums on U. S. bonds...	1,400.00
Bonds, securities, etc.....	500.00
Banking house furniture and fixtures	41,952.54
Due from National Banks (not reserve agents).....	29,714.21
Due from State Banks and bankers	14,227.60

Due from approved reserve agents	25,391.19
Checks and other cash items	5,756.17
Exchanges for clearing house	3,964.26
Notes of other National Banks	13,500.00
Fractional paper currency, nickels and cents.....	791.08

Lawful Money Reserve in Bank Viz:

Specie	\$ 8,945.00
Legal-tender notes 10,000.00	
	\$ 18,945.00
Redemption fund with U. S. Treasurer (5 per cent. of circulation)	1,500.00
Total	\$332,652.65

LIABILITIES.

Capital stock paid in	\$100,000.00
Surplus fund	1,000.00
Undivided profits, less ex- penses and taxes paid ...	2,574.60
National Bank notes out- standing	29,500.00
Due to Trust Companies and Savings Banks	18,627.89
Individual deposits subject to check	170,123.01
Demand certificates of de- posit	3,296.00
Certified checks	225.48
Cashier's checks outstand- ing	7,305.67
Total	\$332,652.65

**Report of the Condition of the
GARY STATE BANK,
A STATE BANK AT GARY,
In the State of Indiana.**

At the close of business on Nov. 27,
1908.

RESOURCES.

Loans and discounts	\$ 71,094.28
Overdrafts	507.34

Other bonds and securities.	75,000.00
Banking house	47,543.51
Furniture and fixtures.....	3,345.81
Due from banks and trust companies	50,831.18
Cash on hand	28,740.03
Cash items	3,001.44
Current expenses	8,972.59
Interest paid	197.58

Total resources\$289,233.76

LIABILITIES

Capital stock paid in	\$100,000.00
Demand deposits \$134,677.10	
Demand certificates	2,545.85
	<hr/>
	137,222.95
Time deposits ..	39,316.24
Time certificates	400.00
	<hr/>
	39,716.24
Certified checks	59.91
Cashier's checks	333.00
Due to banks and trust companies	3,304.56
Exchange, discounts, etc....	8,597.10

RECORD OF SOME REAL ESTATE TRANSFERS IN AND ABOUT GARY APRIL 17, 1909.

Tolleston, lt 11, b 15, Co's 4th add	\$ 500
Gary, lt 30, b 1, 2d Grant Park add	450
Township 35, .806 acre in 9, 35, 9	250
Township, 36, 100x139 feet in s w ¼ 32, 36, 7	1,500
Tolleston, lt 8, b 14, Co's 5th add	700
Gary, lt 6, b 58, original town...	3,500
Gary, lt 6, b 10, Broadway add..	450
Tolleston, lts 32 and 33, b 11, Logan Park add.....	600
Gary, lt 13, b 4, Broadway add..	1,000
Tolleston, lt 18, b 4, Pridmore, Orr & Ulrich's sub (see 10)	1,900

Township 37, 42.25 acres in s ½ 21, 37, 9	1
Township 37, 32, 11 acres in n ½, 21, 39, 9	1
Township 37, 16.099 acres in n w ¼, 21, 37, 9	1
Township 37, 40 acres in n e ¼ 20, and n w ¼ 21, 37, 9	1
Gary, lts 13, 15 and 17, b 78, original town	2,250
Tolleston, lts 19 and 20, b 19, Co's 3d add. and lt 17, b 1, lt 23, b 17, Co's 5th add.....	1,850
Tolleston, lts 14 and 15, b 1, Co's 5th add	2,050
Township 33, 75 acres in 9, 33, 7.	4,875
Township 36, 35 acres in 29, 36, 7	930
Tolleston, lts 36 and 37, b 7, Logan Park add.....	400
Township 36, 10 acres in 29, 36, 9	1,250
Gary, lt 5, b 34, original town...	800
Gary, lt 7, b 81, original town...	625
Tolleston, lts 8 and 9, Caldwell's 2d add	400
Gary, lt 28, b 8, original town...	700
Gary, lts 26 and 27, b 2, Gary Park ad	600
Tolleston, lt 6, b 6, 2d Logan Park add	300
Township 37, pt s w ¼ 25, 37, 10, southwest of L. N. A. & C. Ry., and north of Calumet River ..	5,000
Township 35, 120 acres in 2, 35, 8	1,150
Township 35, 38 acres in 16 and 21, 35, 7	3,400
Tolleston, 60 lots in Red Oak add	2,220
Tolleston, lt 14, b 12, Logan Park add	300
Township 36, 184x255 ft in s e ¼, s e ¼, 29, 36, 7	1,975
Tolleston, lt 7, b 4, Oak Park add	425
Township 36, 7.27 acres in 18, and 3 acres in 19, 36, 9	1,200
Gary, lts 14 and 26, b 10, Broadway add	2,000
Tolleston, lts 3 and 4, b 1, Carlson's 1st add.....	700
Gary, lt 30, b 59, original town...	2,160

Gary, lots 16 and 17, b 83, original town	4,000
Township 34, 80 acres in 16, 34, 7	6,000
Township 34, 6.16 acres in w $\frac{1}{2}$, n w $\frac{1}{4}$, 9, 34, S.	1,000

PLATE MILLS COMING NEXT

Contract for the Machinery Just Awarded by the Indiana Steel Company.

The contract for the plate mill at the Gary plant has just been awarded by the Indiana Steel Company. It will be what is known as "the sixty-inch universal plate mill."

The total capacity of the plate mill will be 75,000 tons of finished product a year. Plates of all sizes up to sixty inches in width and of all thicknesses will be produced.

The decision to go ahead with the construction of the plate mill is but another indication of the diversified products of the Gary mills when they are fully completed.

Foundations Going In.

The entire western half of the mill site is now being allotted to the various mills for the manufacture of steel for general use. The foundations are already going in for the merchant mill and for the billet mill. Before the winter sets in the great concrete foundations for the plate mill and car axle mill will be in place ready for the superstructure of steel and brick during the winter.

FIRST CHRISTMAS EVE.

On Christmas eve, 1906, one of the most notable gatherings that has ever taken place here, was held in one of the little school houses that stood on

Broadway just south of the Lake Shore tracks, the only schools in Gary at that time.

It was the first Christmas tree in Gary, and the celebration that was arranged was attended by practically every English-speaking resident of Gary. It was the first and probably the last time that the entire population of the town was gathered under one roof on such an occasion.

The school house was decorated with evergreen branches, and lighted with candles, while two large Christmas trees, chopped but a short distance from Broadway were loaded with candy and fruit for all of the school children. The treat was bought by a subscription fund taken by the teachers of the school and the amount was large enough so that each pupil received a generous supply of candy.

Only Organ in the Town.

A program had been arranged by the teachers and recitations were given before an audience that packed every corner of the room. When the entertainment was over, the little folding organ, the only musical instrument in the town, wheezed out the accompaniment to "America," and the volume of sound that arose from the entire population of the town bore as much meaning as the anthems sung by the Pilgrims. Like the Pilgrims, the Gary people had found new homes and the hardships attending the establishment of the homes only added to the energy with which they worked. It is doubtful if such genuine good cheer will ever again be known in Gary.

Christmas day was set aside for a complete holiday, and nearly every one remained in the town. The business at the police station on that day was great. Christmas morning found the cells full of revelers of the night before, waiting anxiously to see how they

were to be punished. Judge Fitzgerald arrived at the jail early in the morning, and one by one the men were dismissed, even when their petty crimes were evident. It was their Christmas present.

Great Change in a Year.

In the winter of 1907, things had changed materially. More than 500 residences had been erected and there was ample room for Christmas cheer. Numerous stores on Broadway offered attractive Christmas presents and hotels and restaurants flaunted irresistible bills of fare.

On this Christmas the men who founded the city can scarcely believe that it was only two years ago when there were no houses, no Christmas windows, and Santa Claus had not yet found the young city hidden in the dunes.

NEW BANK TO BEGIN BUSINESS ON BROADWAY NEAR SIXTH AVE. IN DECEMBER.

Prominent Men in Project—Frank A. Vanderlip, Vice-President of National City Bank, New York, Interested.

The Calumet Trust and Savings bank is the title of a new banking institution which will open its doors at 656 Broadway during December.

Among the incorporators of the new bank are Frank A. Vanderlip, vice-president of the National City Bank, of New York, the largest banking institution in the United States.

TOLLESTON NOW LIGHTED.

The electric light line to Tolleston has been completed and lights are now being furnished to the town by the Gary Heat, Light and Water Company. All of the lamps have not yet been placed on the poles.

FIRST IRON ORE HERE

BY APRIL 25

Two New Company Steamers.

It is now planned for the first 1909 cargo of iron ore to reach Gary about April 25.

The Pittsburg Steamship Company, the lake transportation end of the United States Steel Corporation, has been given instructions to deliver at Gary during the coming season a minimum of 2,000,000 tons of iron ore and a maximum of 2,500,000.

Two steamers of the largest class have been added to the steel corporation's fleet during the winter and will trade here regularly. They are known as the E. J. Buffington and the Alva Dinkey.

INCORPORATE THE GARY CLUB

Formal Steps Taken for a Social and Family Organization.

The Gary Club has been incorporated and application will be made for the lots set aside by the Gary Land Company at the northeast corner of Sixth avenue and Adams street for club purposes. It is the ultimate aim of the club to erect a handsome clubhouse on the site selected, with ample grounds for athletic sports on the lots originally reserved by the Land company for that purpose.

FINISH SURVEY IN TWO WEEKS

American Bridge Engineers Securing Topographical Data—Plant Will Have Four Units.

Civil engineers now engaged in surveying the site of the American Bridge works near the Kirk switch yard report that their work will be accomplished within the course of two weeks. They will then return to Pittsburg.

The survey in Gary has been made for the purpose of determining the topography of the site. The site is three-fourths of a mile in length and over 1,800 feet in width. The exact data will be returned to the company so that the engineers in charge of the preparation of the site for building purposes may know every fill and every cut that is to be made.

Four Units in Gary.

The American Bridge Company, it was stated by the engineer in charge of the survey in Gary, would erect four units in Gary. Each of these units will employ 1,000 men, the total number of men employed in the operation of the mills being in the neighborhood of 5,000. In addition to this number there will be clerical and draughting forces consisting of nearly four hundred men. The company will of course have its offices here.

The American Bridge Company does not manufacture its own steel but is supplied that by the United States Steel Corporation. The steel bars, sheets and rods will be assembled by the plant at Gary and here made into structural shapes for use in the construction of bridges.

MICHIGAN CENTRAL TO BUILD

Plans for the new passenger station of the Michigan Central railroad have practically been completed, and work

on the structure will begin at once. The building will be of brick, and will be located on the east side of Broadway, on the north side of the Michigan Central tracks.

COMMON STOCK TO ITS MEN

Steel Corporation Makes Decided Change in Its Profit Sharing System.

A new departure in the profit-sharing plan, giving its employees the privilege of subscribing to the common as well as the preferred stock of the concern, has been announced by the United States Steel Corporation. The price at which the stock is being offered to the employees is \$110 a share for the preferred and \$50 a share for the common. The closing prices for these securities on the stock margin today were 113 and 52 respectively.

The price at which the preferred stock is offered to employees this year is the highest since the profit-sharing plan was started. Last year the employees were allowed to subscribe to the preferred stock at \$87.50 a share. The total subscription amounted to about 60,000 shares, but only about 25,000 shares were allotted.

Since the profit-sharing plan was introduced in 1903 the employees who purchased stock have received in dividends and bonuses close to \$12,000,000.

LINCOLN SERVICES AT CHURCHES

Large Audiences Attend Memorial Exercises Sunday.

Large audiences attended the Lincoln memorial services at the Congregational and Presbyterian churches Sunday evening. At both churches special programs of patriotic songs and

other music were arranged and both Reverend Sullens of the Congregational church and Reverend Walton of the Presbyterian church delivered sermons in memory of Lincoln.

Further services will be held in memory of Lincoln this week by the schools and some of the other Gary churches.

HOLLAND GETS THE TRUTH

"De Telegraaf Van Dorderdad" Devotes Two Columns to Description of Gary.

In the issue of August 13, of "De Telegraaf van Dorderdad," a Holland publication, two columns are devoted to a description of the new steel city, Gary.

The article is a cable message from Cleveland and is an accurate description of Gary and shows that the correspondent had a great fund of correct information about the city.

LIBRARY SHOWS A GREAT GAIN

Total of 2692 Volumes.

One of the most remarkable instances of progress and gain in popular favor among local institutions is that of the Gary Public library, which has been in existence since October 1, 1908. The report of the Librarian for the month of February, which has just been issued, shows there are now registered on the records of the library the names of 486 adult readers and 434 juvenile readers making a total of 920 active patrons of the institution.

CONTRACT AWARDED FOR FIRE STATION AT TOLLESTON

The Tolleston board of trustees on Monday awarded the contract for the

construction of the new fire station to Albert Koepke.

The station will be located at the corner of Grace avenue and Second street and will be completed by February 1.

WORK ON HOSPITAL EXCAVATIONS BEGINS

Tuesday the work of making excavations for the construction of the new \$250,000 hospital for the United States Steel Corporation at Broadway and the Grand Calumet River, was started.

A FINE EDIFICE FOR METHODISTS

To Cost \$40,000 Complete—Building Will Be of Gothic Design—Construction to Begin This Summer.

Plans for the new Methodist church, to be erected at the southwest corner of Adams street and Seventh avenue, have now been decided upon definitely. A meeting of the trustees of the church was held Tuesday night, but no important changes were made in the designs already agreed upon.

The church complete will cost \$40,000. It will have a seating capacity when completed of between 1,000 and 1,100.

Charles H. Slack, formerly a prominent grocer of Chicago, was in Gary Friday looking over the prospects for the establishment of a grocery on Broadway. Mr. Slack expects to make several trips to Gary before arriving at a decision.

HOSPITAL UP TO FIRST STORY.

Rapid progress is being made on the construction of the big \$250,000 hospital for the steel corporation at the Grand Calumet river and Broadway. The work is now being done on the first story of the building, which will be completed this week. All the window frames have been set in place and the structure is beginning to take definite shape.

JEFFERSON PARK**TO BE IMPROVED**

Power Station and Water Tower to be Ornamental Features—Big Thing for West Side.

Improving and beautifying Jefferson Park to make it a most attractive place are about to begin. By September Gary will have on the west side a park which will be a fine setting to that residence section of the city.

Will Be Left Undulating.

No attempt will be made to fill in all the northern part of the park to the street level along Sixth avenue. Instead, the surface of the park will be left undulating, only enough filling in the north end of the park being done to improve the appearance around the pumping station and to give the whole an attractive, park-like appearance.

Of course, no planting of trees and shrubs can be done this summer. The entire park will be put in shape for the planting of trees and shrubs late next fall.

Great Improvement to West Side.

There is nothing which will improve the appearance of the west side more than the beautifying of Jefferson Park, which is right in the center of that residence section. This doubtless would

have been done before, but the delay in the completion of the power station has put off the work until now. In a month more the power station will be wholly completed, and by that time the work of filling in the southern end of the park and the grading of the north part will have progressed to a point where the landscape gardeners can take up the corner devoted to the power station.

JUDGE E. H. GARY MAKES MUNIFICENT GIFT TO CITY NAMED IN HIS HONOR.

One of the Finest Edifices of Its Class in the State to Be Built This Summer.

Judge E. H. Gary will present to the city named in his honor a Young Men's Christian Association building which will be erected at a cost of \$100,000. This sum Judge Gary gives outright for the building and is exclusive of the land upon which it will be erected.

Plans for the structure will be immediately rushed to completion by the architect of the Young Men's Christian Association in New York, and as soon thereafter as contracts can be let actual construction will begin.

NEWS OF STEEL WORLD.

The stock of the United States Steel Corporation Wednesday reached the top-notch prices attained since the corporation was organized, some ten years ago. The advance in prices has been steady for a month, sometimes a fraction up, but always upward.

The top figures Wednesday were reached at 3 o'clock, the close of trading on the New York Stock Exchange.

The remarkable advance in steel

stocks is the cause of much good feeling among the employes of the corporation, who purchased their stock at much lower prices than have prevailed this year. In 1907, employes paid 87 for preferred. This year they paid 110. Those that selected common stock for their purchases this year paid 50.

NOW AND NOT DECADES HENCE.

Gary has certainly fared well in the way of generous gifts from the world at large. Perhaps never before in Indiana, if not in the United States, has a new city, not yet quite three years old, fared so well. All of the denominations have extended a helping hand in the establishing of their churches in the Magic City of Steel. In some instances the donations from the general

church organization have been surprisingly large and the church edifices already erected or to be erected before the end of the year would do credit to a city far larger than Gary.

Most cities have to wait for a Y. M. C. A. building until, through laborious years, funds can be raised among their citizens. In Gary a complete Y. M. C. A. building, the building, land, and equipment costing not less than \$175,000, will be given out of hand.

Two great hospitals will be completed in Gary before the end of the year 1909. Both structures in their architecture and equipment will be unexcelled in any city of the Union with a population of 50,000. It has come to pass that Gary will have in its earliest years what ordinarily would have been acquired only after decades had passed, all through the generosity of those who have faith in the city's future greatness.

THE PERMANENT AND INCREASING GREATNESS OF GARY

is as certain as that of the United States government. Two factors only are needed for any reasonable man's convincing; first, the continued demand for the United States Steel Company's, varied products, and second their equipment for a continuance of the production.

The demand is multiplying every decade. In every city in the land are being built towering sky-scrapers of steel construction. For instance in the new city hall in Chicago the steel required will weigh **two thousand tons**. There are five-fold more large iron bridges built each succeeding decade, and the railroad extension and re-equipment is beyond comprehension.

James J. Hill, the wonderful head of the Great Northern System, in a recent letter to the governor of Minnesota, declared that "the building of 15,000 miles of additional railroad trackage every year for the next five years, at an annual cost of over one thousand one hundred million dollars, is absolutely necessary."

This will require two million tons of steel rails every year, which is nearly two-thirds of the production of all of the rolling mills in the United States, and of course, its supply will devolve largely upon the great Economical plant at Gary.

The United States Steel Corporation owns as much land as is comprised in the three states of Massachusetts, Vermont and Rhode Island.

It employs one hundred and eighty thousand workmen.

More than one million persons (which equals the population of Nebraska and Connecticut), depend upon it for their living.

It paid out in wages last year one hundred and twenty-eight million dollars, which is more than the United

States government paid for its army and navy.

It owns railroad tracks which would extend from New York to Galveston, Texas.

It owns thirty thousand ears and seven hundred locomotives.

It has ninety-three blast furnaces which run night and day, and fifty great iron mines with ore enough to last one hundred years.

It makes more steel than Great Britain and Germany.

It burns ten million tons of coal a year, eleven millions tons of coke, and fifteen billion cubic feet of natural gas.

Its supply of fuel will last sixty years.

It paid four hundred million dollars for the great ore beds on the shores of Lake Superior.

Steel Rails Already.

To those of us who have been in touch with Gary from the start, the following from a Gary paper of May 5, 1909 seems a dream. Never has so great a thing arrived at results so quickly!

Loading Steel Rails Here.

The Sharples, which wintered at Kingston, brought a cargo of paving stone from Alexandria Bay in the St. Lawrence river. She is loading 2,000 tons of steel rails here for delivery to the Great Northern railway at Duluth. This is the third cargo shipped from the Gary mills this spring.

READY TO BEGIN**MERCHANT MILLS**

New Era of Construction to Provide a Widely Diversified Output at Hand.

(Written in August, 1908.)

The important announcement has come from the Indiana Steel Com-

pany that the construction of the great mills for the manufacture of merchant steel and iron will begin at once. This work will be pushed vigorously, which means that there will be no lessening of the army of construction during the coming year.

The wide stretch now vacant between the rail mill and the billet mill and the western fence is to be filled up by the immense structures where steel and iron is to be converted into the finished product. Among these structures will be one where car axles will be made, itself a most important industry. In another building structural steel will be produced. All kinds of steel bars for the general trade will come from still another building.

For many months the engineering corps of the Indiana Steel Company has been at work preparing the plans for one of the most complete merchant mills in the United States, if not in the world. These plans have been so far completed that it will not be long before construction begins by building acres of concrete foundations.

To Fill Western Part.

When these buildings have been completed, the western part of the plant will be as well filled with structures as the eastern half, where the blast and open hearth furnaces are now located.

Although the army of construction has been engaged now over twenty-six months in building the Gary mills and a portion of them is about ready for operation, a comparison with what has already been accomplished with what is yet to be done makes it evident that only a fair start has been made. This army of construction, now four thousand strong, has at least two more years of work before the mills approach anything like completion, and even then it will be two years more before the

ultimate plans of the Steel Corporation take concrete form in buildings and machinery.

To Push Ore Docks South.

The iron ore docks have been completed up as far as the first set of furnaces, but they must be pushed farther south at once to front the second batch of furnaces now under way. One open hearth is now practically ready for operation and a second one is well along, but the foundations are not yet fully completed for the third and have just been commenced for the fourth. There are two more open hearth buildings, on which nothing has as yet been done. The rail mill is ready for operation. In fact, the sections of the mills which will be given over to the making of steel rails is further along than any other part, and it is likely that the manufacture of steel rails will begin the coming winter. Good progress has also been made on the billet mill, but all that important part of the plant which will be devoted to the manufacture of iron and steel in diversified forms for the general trade has yet got no further than the completed plans which are now ready to be passed over to the commanders of the army of construction.

To Light Furnaces When Possible.

It can be stated on authority that fires will be lighted in the blast furnaces for the making of pig iron the earliest day that they can be got ready. Every effort is being bent to push that day forward as far as possible, but as yet no officials of the Steel Company will make their predictions as to how soon this will be. As soon after as the open hearth furnaces are in shape to begin the making of steel, the pig iron will travel from the blast furnaces to the open hearth, and as soon after that as the rail and billet mills are ready to

begin turning out the finished product they will be added onto the chain.

More Work than Ever Before.

In the meantime the amount of construction under way will equal if not considerably exceed that of last fall, winter and early spring.

In other words, the force to operate the first section of the plant will come in on top of the army of construction. There is likely to be five thousand in the operating force. Added to the construction forces, this will mean that nine thousand men employed in the steel mills must be housed somewhere the coming winter.

THE FIRST GARY PIG IRON

(December, 1908.)

The first pig iron to be made in Gary was turned into the molds of the pig machines at the southeast corner of the mills Tuesday. The pig machines, which will be recognized by passengers who take the Lake Shore trains as the large building to the northeast of the station, have been ready for about a month.

First Furnace Satisfactory.

The first furnace, which was lighted Monday forenoon, has operated to the great satisfaction of the officials of the Indiana Steel Company. After a twenty-four-hour run nothing had occurred in the operation of the new furnace which had not been anticipated. There were a few minor leaks, some slight, insignificant explosions as the gas found its way for the first time through the great pipes. There was nothing serious enough, however, to be called a mishap and the furnace was doing its work well.

It will take from four to six days to get gas enough to run one of the gas engines in the electric power station. In the meantime the blowers are being

operated by a steam turbine engine. As soon as there is a sufficient quantity of gas to make the tests of the gas engines, that final link in the making of steel at the Gary mills will begin to be welded.

A Week Before the Next One.

It will be a week or ten days before the next or second furnace is lighted. The two furnaces will then work in pairs until the time comes to start the open hearths and the rail mill.

The second pair of furnaces is now practically ready to be operated, but the fires in them will not be lighted until the open hearths and the rail mills begin operations.

The production of pig iron now under way is not for the purpose of having pig iron, but to get the gas which is generated in its production. In other words, the furnaces are being operated to secure a by-product rather than what is ordinarily the more important output. When the mills are in full operation, there will be no pig iron made except Saturday nights and Sundays. All the metal will continue hot from the time it leaves the furnaces until it comes out as finished product from the rail or billet mills.

Most Delicate Work Ahead.

The work ahead of the construction department now is perhaps the most delicate that the forces of construction have encountered since ground was broken thirty months ago. In the electrical power station are the great gas engines stretching for a quarter of a mile, which must be gotten into working order before the open hearths and the rail mill can begin. These gas engines are among the largest ever constructed. They are connected directly with electrical generators, and altogether they make the greatest display of resistless power as one glances in either direction from the balconies that

has ever been seen. But not one of them has yet been tested. They have been installed with great care, of course, and the electrical generators have been built up alongside. Nothing more can be done until the gas with which they are to be operated can be supplied.

Tryout to Begin Soon.

As soon as the two furnaces produce a sufficient quantity of gas to be stored in the great gas-holder which stands between the furnaces and the electrical power station, the tryouts of the big gas engines will begin. It is expected that the engines and the electrical generators will be found to work satisfactorily, as the greatest care has been taken in their installation, but no doubt changes will have to be made here and there. Some minor things will be found out of order and will have to be replaced.

It is for this reason that the steel officials decline to make even a guess as to when the open hearths and the rail mill will begin operations. Both have been completed and are practically ready for the turning on of the electric power. There are a few little things yet to be done, of course, for the officials have known that there would be considerable delay at the electrical power station and have taken their time in putting on the finishing touches at the open hearth and the rail mill.

Second Pair of Furnaces Ready.

The second pair of furnaces are in the same shape as the open hearth and the rail mill. They are practically finished, but will not be started until the manufacture of steel begins.

The second furnace will be operated solely because it is necessary to have a pair of furnaces working together in order to get a steady supply of gas. The supply of gas, of course, runs up

and down with each furnace, but when the two are operated together the ups and downs offset each other and a comparatively steady supply of gas for use in the gas engines will be secured.

1,000 Tons of Pig Iron Daily.

The furnace already in operation will make from 450 to 500 tons of pig iron per day. As yet it is not producing to its full capacity, and it may take a week before it reaches its maximum output. The pair will turn out about 1,000 tons a day. All of this pig iron will have to be stored for use later on after the open hearths begin operations in making steel.

In the operation of the furnaces from 200 to 400 men, working in shifts of twelve hours each, are required for each furnace. The variation in number is due to the amount of handling required for the product. It is expected that until the open hearths and the rail mills begin, the furnaces will furnish employment to between 700 and 800 men.

Recruited from Many Points.

The force at work at the furnaces has been recruited from many points and the skilled men were selected with great care and are a picked force.

OPPOSITION HAS NOT HARMED.

The Standard Oil Company has been given the reputation of crushing its small competitors. The United States Steel Corporation, through all the years, has kept itself free from this charge. But in the fall of the year 1908 what are now spoken of as the independent companies, aggregating quite a large steel production, entered upon a united effort to get more orders. This was probably due to a depression in the steel trade resulting from the sudden

and decisive slump in business conditions in October, 1907. The Steel Corporation promptly met this movement by necessary cuts in their selling prices, which in many things, and for a number of months, were so material as to cause a widespread impression throughout the United States that the Steel Company's former immense earnings might never be realized again. The market value of both their common and preferred stock decreased. It is now evident that this decrease was from the same causes that decreased values in everything else, and not from competition by the Independent Companies.

Within the last week the quarterly statements of the Steel Corporation to March 31, 1909, have become public, and show that for the first quarter of this year the net earnings were much larger than any of the numerous unofficial estimates had indicated, being \$22,921,268 as compared with \$18,229,000 in the corresponding quarter of the year 1908. They also show unfilled orders on the books calling for 3,542,591 tons of material as compared with orders for 3,603,527 tons on Dec. 31, 1908, and 3,765,343 tons on March 31, 1908. It is said that in addition to the orders on hand on March 31, 1909, the April bookings were not only very large, but that these orders are "live" ones, that is, for immediate shipment, whereas in the preceding quarter, while contracts were made, buyers were in no hurry to have them filled and many of them stood on the books for weeks without a ton being turned out against them in the mills.

The earnings for the last quarter as above, are significant when we remember that the principal official cut in selling prices was made in February of this year.

The usual dividends were declared, and stock market quotations show that few stocks have rallied so favor-

ably from the general depressed prices of both common and preferred as in the case of the Steel Company.

The Chicago Examiner of May 2, 1909, in speaking of any probable effect of the tariff changes on the Steel Corporation's prosperity, says:

"An official of the trust has boasted that with the Gary plant steel can be made \$5 cheaper than by any competitor, thus placing the trust beyond fear of competition or of tariff reform. The report of \$22,900,000 earned for the first quarter of this year was more than a million greater than anybody expected. But of greater significance than this was the volume of orders on hand.

In January orders disappeared entirely when the cut in prices was made and they came in volume only after the public understood that the bottom had been reached. Orders have been hurried by the announcement of an increase in prices by the trust and by several leading independents in the past week."

Of course all talk of \$5.00 per ton is unreasonable. Two dollars a ton disadvantage would paralyze any steel mill.

A SUGGESTION FOR CHICAGO FRIENDS

We are at an age of impatience with having our home life confined to the strenuous city. Except during the winter season, we long for a comfortable rural home, however humble. The rich are meeting this desire with expensive country houses erected on acres of possibly slowly increasing value. Their children may not want them, and great depreciation in the value of the buildings will be evident when a sale must be made.

Why should not you and I select and purchase now, a few or many acres, not in Gary, but in the Gary region,

and get the benefit as we grow older, of the **sure great increase in value of the land**, and in the meantime enjoy our summers on it in a modest but comfort bungalow, for which I have 200 architect's plans, to which you are welcome?

There are many areas of desirable properties for such a move. There are plenty of trees; soil that is good, or can be made good, scores of paved roads being built, quiet, respectable rural neighbors, feasible deliveries of food supplies, fuel, ice, etc.; nearby stores, churches, physicians, mail deliveries, telegraph and telephones, and such splendid steam and electric transportation to Chicago (much of it on fifty minute trains) that we could attend to our Chicago business daily.

I would like to take this up promptly with some of my friends, as the ground should be purchased now, even though not used until next spring.

GARY'S HARBOR

IS NOT EXCELLED.

HOW IRON ORE

WILL BE RECEIVED.

Human Labor Largely Eliminated in Taking Cargoes from Ships and in Feeding the Furnaces.

(Written in 1908.)

In many important ways the harbor at Gary will stand in the front ranks of the harbors of the world. In the rapid handling of iron ore, which, of course, will be the chief commodity of the new harbor, it will be without a rival anywhere. Every device known to man which tends to save time and labor will be installed on the water front. Most harbors have grown up from small beginnings, and plans for their development have had to be made to meet existing conditions. In Gary

the plans were made first. The result will be to give a harbor of unequaled facilities, with no limit on labor-saving appliances.

Straight into the sand dunes a channel is being dredged 250 feet wide and 25 feet deep. For a mile this channel or harbor will be lined with concrete docks on the side toward the mills. This solid wall of concrete rises ten feet above the water line.

For Railroad Tracks.

The dock is 62 feet wide. Tracks are laid on each side of the dock on which the vessel-unloading machines will travel. Between these great tracks four railroad lines will be constructed. The purpose of the railroad lines is to enable the vessel-unloaders to drop their burdens directly into railroad cars when ore is to be shipped from the docks to Joliet and other points.

Next to the unloading dock are the receiving bins for iron ore to be used in the furnaces. These reservoirs are divided by heavy concrete walls 87 feet apart. When the mills are fully completed the reservoirs will extend nearly a mile in length. With the present construction, they will have a capacity of about one million tons, which will be ample to supply the mills with iron ore for the five months during the winter and early spring, when lake navigation is closed by ice. This capacity will be more than doubled when the mills have been entirely completed.

Gigantic Ore Bridges.

Tracks are laid on the top of the concrete walls of the reservoirs, and over these tracks will run the great Hoover & Mason bridges, which will be used to carry the ore from the place where it is dropped by the vessel-unloaders to the bins where it is prepared for the furnaces. These iron ore bridges are the largest ever constructed

in the world. They rise 85 feet above the floor of the reservoirs and are 497 feet long. The clam-shell appliances with which the bridges are equipped will scoop up and carry away fourteen tons of iron ore at every trip.

After the ore has been carried to the bins it will be dropped into the Brown hoisting bins alongside the furnaces. More railroad tracks will be located at this point for the transfer cars to carry the ore direct to the furnaces. The cars are used on account of the fact that it is easier to move them than to move the great bridges. From the cars the ore is shot into elevators and taken to the top of the furnaces, ready for use. The bins are built double, with one part for iron ore and one part for coke.

Not Touched by Hands.

From the time the steamer with its 10,000 or 12,000 tons of iron ore reaches the harbor, no human hand touches the iron ore in moving it. The clam-shell of the vessel-unloader is dropped into the hold of the ship and automatically seizes its load of ten tons, which it swings around and drops into the reservoir or into the waiting cars. It takes less than one minute for the vessel-unloader to seize its great load, drop it, and be back in position to take the next.

The great clam-shell grab of the bridge drops under the pile of iron ore, where it has been left by the vessel-unloader, seizes in its capacious grasp 14 tons, lifts its load from 50 to 75 feet into the air, and carries it a tenth of a mile toward the furnaces as rapidly as the human eye can move. There the ore is dropped into cars or into bins, as the case may be, and from there the ore is again moved without the touch of a shovel on its rapid progress toward the mouth of the furnace.

Does the Work of Hundreds.

In his little house on the vessel-

unloader one man does the work of a hundred under the old way of handling iron ore with shovel and hoist. In another little house, far up in the air on the bridge, another man, by the simple turning on of a current of electricity, performs the labors of hundreds more with their shovels and wheelbarrows. The labors of another hundred are saved by the automatic unloading of the cars which transport the ore to the furnace elevators. Everywhere it is electricity which furnishes the power to move these great quantities of ore at lightning speed from the holds of ships to the gaping mouth of the furnace. This power is no insignificant item, for the easy swinging of a load of fourteen tons high in the air for 500 feet, takes not only immense power, but unlimited strength. One of the vessel-unloaders has been completed and now sits at the sea wall like a battleship, ready for the coming fray. The first of the bridges has also been completed. Four more unloaders and four more bridges will be placed on the water front before the first ship arrives with iron ore next summer. Part of the steel for their construction is already on the ground and the rest is due within a short time. This equipment is but half of what will be placed on the sea wall when the full plans of the steel mills are carried out.

Fastest in the World.

The results obtained in the rapid handling of iron ore are without precedent in the world. Ships carrying from 10,000 to 12,000 tons can be unloaded on the water front between sunrise and sundown. At the iron ore shipping ports these same ships can be loaded in from three to six hours. But a little over a working day on each round trip of 2,000 miles will be taken up with the handling of cargoes. The story of cheap lake transportation is told in the labor-saving devices on the

Gary docks. It is because ships can load and unload their cargoes so quickly that iron ore can be carried 1,000 miles at 80 cents per ton, or less than it could be handled by teams across town.

Spectacular Sights.

While the vessel-unloaders and the bridges will be the great, spectacular sights on the water front, the great iron ore reservoirs will attract much attention from visitors to the mills. Their walls of concrete are from five to eight feet in thickness. They have concrete floors eighteen inches thick, five feet above the lake level. When fully completed these reservoirs will extend along the harbor for nearly a mile. It is said that nowhere else in the world has it been possible to secure such unlimited storage for raw material at any of the great steel plants. There will be millions of tons of iron ore within easy reach of the gigantic grab which drops down from the bridges. There will be no extra handling, and not a single item to increase the cost of production from the time the iron ore is dropped into the holds of ships on Lake Superior until the steel comes out as a finished product.

SOMETHING NEW EVERY WEEK

The reader must not expect this book to remain up to date, even until it reaches him. Gary, even in the largeness of its things, develops swiftly. The writer has tried to avoid mention of things that are "going to be."

On February 1st of this year an announcement came from Pittsburg that

the Steel Company had abandoned its work on additional coke ovens in Pennsylvania, which were to have been built at the cost of \$3,000,000 and that in their stead an enormous by-product coking plant was to be established in Gary. The project abandoned included 700 ovens at Filbert, 500 ovens at Ralph and 500 ovens at Sarah, Penn.

And now, as these pages are about completed, comes the announcement of the beginning, at once, of the construction at Gary of 560 by-product ovens as the first section of the enormous coking plant there contemplated. The site is just east of, and adjoining, the new turning basin, the east side of which is to be converted into docks for the unloading of steamers bringing coal from the Lake Erie ports, the turning basin to be enlarged and thus becoming an important part of the harbor.

Between 6,000 and 7,000 tons of coal must be handled every twenty-four hours with the first lot of ovens to be built. Enough gas will be manufactured in the coke ovens to supply Chicago and many other towns in Illinois and Indiana, but of course its consumption will be throughout the local field. The plant will effect a great saving in the cost of making coke which will be put on the market as fuel in competition with coal, and in as much as coke is a smokeless fuel, it will have much to do with preventing the smoke nuisance in Gary.

By-product ovens have been in successful operation in Germany many years and experiments with them in the United States in the last five years have proven remunerative.

A FEW PAGES FOR THE PESSIMIST

Somewhere between the beginning and end of this volume the pessimistic reader's faith may balk and he will think: "It's too much even for this age. It cannot keep up this marvelous pace. A slump is coming. Something adverse **must** happen about now in this great enterprise." Let such a reader consider the following:

FIRST—THE STEEL COMPANY'S CONSTRUCTION WORK AT GARY IS ONLY FAIRLY UNDER WAY. It will not be many weeks now before the mills will end the period of tests and get down to work on the first orders on the books. These orders call for about 100,000 tons of open hearth steel rails of the most approved standard, and it is expected that deliveries will begin on them early this spring.

By the time this book reaches its readers the fourth of the blast furnaces will be lighted. It is now ready for the match.

Most Remarkable Period of Development.

Then will begin a most remarkable period of development.

In the operation of the mills, close to 5,000 men will be required. But at the same time that operation begins, the army of construction, at least 5,000 strong, will return to the mills. While a vast amount of work has already been done to get the mills to a point where steel rails can be made, the construction has but fairly started. It has been kept up to some extent during the winter, but the forces have not been as large as a year ago, because it was found that the best results were not obtained by laying concrete in cold weather.

The full force is now returning. Four more furnaces, pushed along as far as possible last fall, are to be

rushed to completion. The great billet mill, now only inclosed, is to be made ready for operation.

A Square Mile to be Covered.

All the merchant mills on the west side of the plant extending to the west fence, nearly a square mile in area, are to be built and equipped.

While all this is being done, the foundations of the third and fourth bunches of furnaces and the third and fourth open hearth buildings must go in, and the superstructures, like great exposition buildings, must go up.

One-Third Completed.

It is a fair statement that the construction already covered by appropriations from the United States Steel Corporation and for which the funds have been set aside is not one-third completed.

By the most conservative estimates of the Steel Company's officials, at least 10,000 men will be employed in the plant by early summer.

At the American Car and Foundry Company's site, engineers have been at work all winter, preparing to begin building operations in the spring. The entire tract must be graded and the Grand Calumet river must be straightened at that point before actual construction commences, but a considerable force will be required from the outset in preparing the site.

The engineers of the American Locomotive works have also been over the site for its great plant east of the city, and the architects and construction engineers are now formulating plans.

Ready to Begin Construction.

It is said that the American Bridge Company, subsidiary of the United States Steel corporation, is ready to begin construction.

The coke plant has progressed to a point where the engineers of the steel

corporation are now preparing the plans. This work, in itself a big undertaking, is well along.

Many Small Manufacturing Plants.

At least half a dozen smaller concerns, which will supply the big plants, have been allotted sites, and will begin construction as soon as the buildings of the American Car and Foundry and the American Locomotive works begin to take shape. These smaller concerns would be considered a rich prize by ordinary cities, but here they are simply lost sight of in the grand whirl of industrial development.

But it is in the city itself that the most feverish activity will be shown this year. The rush to build homes has already commenced. At least 300 houses and flats are now under construction within the city limits.

Three Big Public Structures.

Bids have been taken from contractors for three extensive public structures. Perhaps first among them is the Union passenger station of the Lake Shore and the Baltimore & Ohio at Broadway. This structure is the most elaborate passenger station on

either road between their terminals, and will cost about \$200,000. Bids were received at Baltimore some weeks ago, seventeen of the principal construction companies of the United States competing. The award would have been made before this and the building commenced, but for the sudden death of Chief Engineer Crouthers of the Baltimore & Ohio.

Half a Million in Company's Hospital.

The plans for the hospital which the United States Steel Corporation will build for its employes in Gary, are now in the hands of contractors, and bids will be opened in a few days and the contract closed. It is estimated by one of the leading Gary contractors, who has put in his bid, that the cost of building outside of steel and one or two other items, which the steel corporation reserves for itself, will be about \$200,000.

The big stretch of sand between the elevated railways and the Grand Calumet river for half a mile will be converted into park grounds for the hospital. The total cost of the building and grounds is placed at \$500,000.



GARY'S NEW CITY HALL.

City Hall Soon to Go Up.

Bids will soon be opened for the new City Hall at Massachusetts street and Seventh avenue. This building will cost about \$50,000.

Electric Line to Be Built.

In the way of electric roads, the line from Valparaiso and Hobart will be built this season, at least between Gary and Hobart.

Crown Point capitalists are moving heaven and earth, so to speak, to get their line twelve miles long, built in the spring. Public sentiment runs so high in Crown Point that local capital will not wait for the promoters any longer, but will go ahead on their own account, as they have kept the franchise in the control of the citizens' committee.

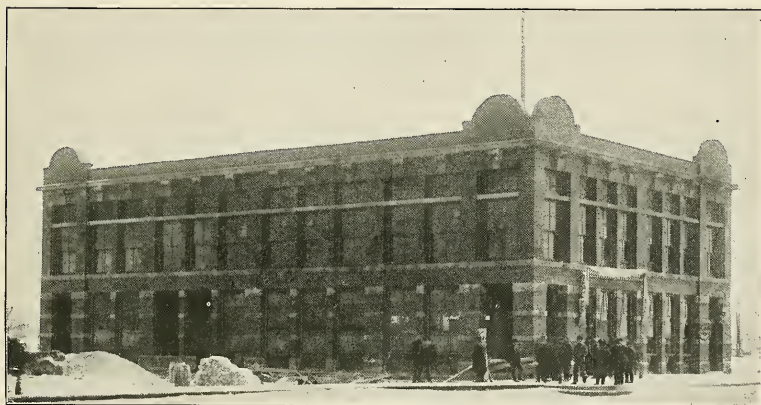
doubtless be built on schedule time. It comes into Gary at Fifteenth avenue.

The Gary & Interurban now also in the grip of the Shonts group, is obligated by its franchise to build its Fifth avenue line this year. This is about two miles long. In addition to these electric lines, there is another planning to get into Gary from Whiting. It has obtained franchises in Whiting and East Chicago.

Gary & Western Ready.

The right-of-way of the Gary & Western is completed, ready for trains as soon as the New York Central lines decide to begin running them. It is given out that the Gary & Western service will start in May at the latest.

In addition to all these improvements requiring an army of men, all the streets in the first subdivision are



THE BINZENHOF RESTAURANT—PUBLIC HALL ON THE SECOND FLOOR

Still Another Interurban.

The New York and Chicago Electric Air Line has announced its intention of reaching Gary by midsummer. Since the Shonts group of financiers got hold of the road, there is ample capital back of it, and the line will

to be paved and sidewalks laid in the spring. The work is now only about half done. On the south side, outside of the Steel Corporation's property, and in Tolleston, there will be a great rush in the building of houses and the improvement of streets. Many public improvements have been ordered by

the trustees of both Gary and Tolleston.

At Least 20,000 Men At Work.

By Midsummer next there will be at least 20,000 men employed in Gary. This is not an offhand estimate, but is the result of careful estimates by officials and by the contractors who will do the work.

The above and other large matters are mainly for the present year. For each of the following years there will be as much or more. The American Steel & Wire Company, being a subordinate company of the United States Steel Company, makes it almost certain that their contemplated immense plant will be built next year, by which time there will also have been completed such large works as the Plate Mill and other similar adjuncts of the steel works.

SECOND—THE INCOMING OF INDEPENDENT FACTORIES, IN AND ABOUT GARY, IS BARELY STARTED AND WILL CONTINUE FOR YEARS.

The significance of this is far from trifling.

The American Car and Foundry Company, first of the great manufacturing concerns of the country not allied with the United States Steel Corporation to locate in Gary, will start immediately on the construction of its plant west of the city.

The Gary works of the American Car and Foundry Company, when completed, will turn out 200 cars a day and will employ from 8,000 to 12,000 men. The building of this great plant is not only a great boom to Gary, but the town of Tolleston, which lies directly south of its site, will be largely benefited.

The engineers' surveys of the ground and the plans for the buildings and machinery were filed away, ready for future use. Payments were made to

the Gary Land Company for the 160 acres of land which had been contracted for. This land lies just south of the Baltimore & Ohio right-of-way west of the Grand Calumet. It is a triangular strip with the Grand Calumet at its south-eastern boundary. In addition to the 160 acres originally purchased, the American Car and Foundry company, on the advice of its engineers, selected 52 acres more in order to complete the site. This gives the company 212 acres all of which will be occupied by buildings and sidings.

Before the end of the week the engineers will be back on the ground making their final surveys. There is a great deal of work to be done in leveling off the tract which is covered with small sand dunes before actual construction can be commenced. It is expected that before the end of the year the company will be ready to let the contract for the grading.

A Great Corporation.

The American Car and Foundry Company is one of the great aggregations of capital in close touch with, but not subsidiary to, the United States Steel Corporation. It is capitalized at \$60,000,000. It has plants now at Detroit, Jeffersonville, Chicago, St. Louis and a dozen other points and builds the larger portion of the cars in use on American railroads. The Gary plant will excel in size any of those now in operation.

The Car Axle Plant.

It was to supply the American Car and Foundry Company with car axles that the Steel Company added to its mills a department to turn out steel car axles. This industry has hitherto been largely supplied from Pittsburg, and the Gary car axle plant is the first large institution of its kind in the west. Although but a part of the In-

diana Steel Company the car axle department is in itself a large industry and one which would be welcomed to any of the smaller cities as being an event worthy of a big celebration.

In preparing the ground for the American Car and Foundry Company a new channel will be dug for the Grand Calumet river, which, instead of winding through the lowlands will be straightened and deepened at the southern boundary of the car manufacturing plant.

American Locomotive Works.

The recent location of the American Locomotive works in Gary is the most important event in the history of the "Magic City of Steel" since the coming of the American Car and Foundry Company.

It can no longer be said that Gary is but a one-company town. Besides the United States Steel Corporation, with its great subsidiary companies, there will be the American Car and Foundry Company, the largest manufacturer of steel cars in the world, and the American Locomotive works, which builds more locomotives than any other company in America.

Both the American Car and Foundry Company and the American Locomotive works are outside the Steel Corporation. They have selected Gary as sites for their new plants on account of its unexcelled transportation, and also to the advantage of having their plants in proximity to the source of raw material at the Gary steel mills.

The location of the American Locomotive works is particularly fortunate, for in the building of locomotives the large majority of the men are high-priced, skilled workmen. There is but a fraction of common labor in such plants.

The announcements made in the newspapers from the office of the company in New York state that from 12,-

000 to 15,000 men will be employed in the new works. These figures are based on the ultimate plans of the company and may not be reached for two or three years. The first unit of the plant, the construction of which will begin immediately, will employ at least 4,000 men. Of these, at least 3,000 will be highly-skilled mechanics.

To property-owners in the present business center of Gary the location of the locomotive works to the eastward is an admirable balance to the American Car and Foundry on the west. It assures for all time the maintenance of Broadway in its present standing as the business center of Gary.

The Economist magazine of Chicago must have had inside information of the coming of the American Locomotive works when it announced that "engagements already entered into contemplate the employment of 75,000 men and a population of 250,000 in the near future." This statement was taken as perhaps too roseate a forecast when it was made, but the figures are now rapidly approaching it.

The Annual Report of the United States Steel Corporation

at the beginning of this year states, among other things, that "At the close of the year, there was unexpended on appropriations authorized for construction and improvement at Gary, \$22,500,000." Of the former appropriation of \$50,000,000, there was an unexpended Dec. 31, 1908, balance of \$7,202,770.43. This sum, according to the understanding of the officials of the Indiana Steel Company is in addition to the \$22,500,000 reported above.

What Was Expended in Previous Years.

During the first year of Gary the corporation expended \$19,316,555.27 and during the second year \$18,848,472.19.

The estimated expenditures for 1909 are slightly less than for either of the first two years, but the expenditures for those years included large sums for real estate, and did not represent as much money paid for actual construction as it is now estimated will be paid during the current year.

THIRD—Many VERY LARGE THINGS IN GARY'S GREAT FUTURE ARE AS YET RARELY THOUGHT OF OR SPOKEN ABOUT.

If you will ask any old resident of Chicago he will tell you that the one great thing of early force in Chicago's growth and greatness, was what we now call the old Illinois and Michigan Canal, the then outlet (now inlet) of which was at the Chicago point on Lake Michigan.

The liveliest large topic of national development now before the American people is the coming great Water Way from Lake Michigan to the Gulf of Mexico and from thence through the Panama Canal to the Orient. It is morally certain that the Lake Michigan inlet to this great water way, or at least one of two such inlets, will be through the bed of the Grand Calumet River at Gary, and the writer predicts among other great things (now rarely spoken of in Gary's great future) that it will be the principal Port on all the Great Lakes.

For years there has been continued friction between what are called the rural representatives in the New York state legislature and representatives of the interests of New York City. The

same condition has for a long time existed between those representing the City of Chicago and representatives of the rest of the State of Illinois. It will require wise thinking and some lines of policy hardly to be expected, if this conflict does not soon come into existence in Indiana. Gary is fast becoming the great city of Indiana. Already there is in New York State a forceful agitation and contention for the setting apart of New York City and its surroundings as a new state. The writer prophesies that the present generation will see a new state formed of the northern part of Illinois, including Chicago, and the northern part of Indiana, and will see Chicago and Gary one city, extending from Waukegan to Michigan City.

Chicago is now probably the greatest manufacturing city in the world. The writer has reason for believing that its manufactures lead the world, not only in the aggregate of value in dollars, but in quantity by carloads.

When to this wonderful third city of the world is added the coming hundreds of thousands along the southern shore of Lake Michigan, forming the world's center for the great Iron and Steel Industry with the unparalleled development of municipal conditions, attractiveness as a place of residence, any many, many times multiplied values of its real estate, thousands who have not read this little volume will say:

"IF I HAD KNOWN ABOUT GARY IN 1909,"

“Dont’s.”

Do not arrive at Gary expecting the privilege of going through the immense mills, unless you have:

- 1st. A permit, which can only be obtained in Chicago.
- 2nd. A strong pair of legs with high shoes for tramping perhaps a half day through the sand.

Do not write to me about obtaining at Gary employment or a business opening, as I am neither informed nor situated to answer such letters.

Do not write me for maps, etc., as the map in this volume is the only one I could send. It is one of the best and latest.

Do not write asking as to the character or standing of any real estate operator at Gary or the quality or value of his property.

Do not write to me at Gary or expect to meet me there except by appointment, and if by appointment let it be definite as to the minute and place, and keep it promptly. I am on the go about half the time keeping posted on Gary. Unless we are personally acquainted, it is better to call on me in Chicago briefly at first, arrange for any desired advice and make appointment for an hour or a day later. Such an appointment, however, can be arranged by mail. If you bring or send a friend, have him read this book before coming—it will save time and talk.

Do not take a dancing lesson on a vacant lot nor buy or talk real estate on a street or sidewalk. If a real estate man cannot arrange to first see you in his office, you can do without him.

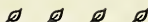
Do not seem foolish and say: “If that man’s real estate is worth what he asks for it, he would not sell it for that,” and do not continue foolish and say: “If that man will give me my price for my Gary land, it must be worth more and I will not sell it.” That kind of reasoning would stop all buying and selling, except in necessities. Take a fair profit and let the buyer also make something.

Do not be inconsistent, and say: “That land the owner offers for \$1,000 an acre only cost him \$600 an acre a year ago, hence I won’t buy it,” when you know very well that if the value and price of the land was not increasing you would not think of buying it.

Do not disclose paresis by asserting that the Steel Company is expending a hundred million dollars at Gary in order to sell some thousands of dollars worth of land.

Three Stories.

Mr. Brown came to Chicago, where he knew no one, to buy an automobile, about which he knew nothing. On his arrival at Chicago, he felt favored in falling in with a stranger on the street who "could tell him all about all of the different kinds of automobiles," and took him to one salesroom and kept him away from all others, and his purchase had so much "fat" in it for several people, he never could have sold his machine, even new, for within \$500 of what he paid for it.



Mr. Smith went to Chicago for the same purpose, under the same conditions, except that he did not fall in with the street friend. He visited fifteen salesrooms, saw sixty different kinds of automobiles, and talked for hours on a subject he did not understand, with scores of men he did not know. He heard so many bad things at each place about the fourteen other places and their machines, that he became discouraged and went home without buying.



Mr. Jones also went to the city on the same errand, but on his arrival in Chicago before talking with any automobile people, he went to a man who knew a great deal about automobiles and did not represent any of them. He had satisfied himself that this man was both posted and honorable, and then told him he wanted an hour of his time, information and advice and was willing to pay ten dollars for it, to which the man agreed. At the end of their talk the man informed Jones that it was quite feasible and customary for him to go with Jones to several of the salesplaces, and, while fairly and honorably helping Jones to a right selection and a low price, to get from the sales department, a part of the commission on the sale.

This pleased Jones very much, as he wanted still more of the man's time and advice, so for several days they together looked over the subject and Jones made his purchase at a reduced price and the man not only received from the company pay for his time, but returned to Jones what he received for his first interview. Jones bought the same kind and size of automobile that Brown bought, but for a thousand dollars less than Brown paid.

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